

UNIVERSITY OF GHANA
CENTRE FOR SOCIAL POLICY STUDIES



EFFECTS OF ILLEGAL MINING ON YOUTH EDUCATION IN THE EAST AKIM
MUNICIPALITY OF GHANA

BY

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(10638304)

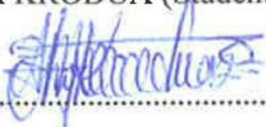
THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF ARTS IN SOCIAL
POLICY STUDIES DEGREE.

JULY, 2019

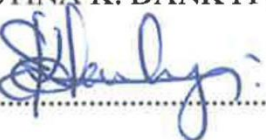
DECLARATION

I hereby declare that this submission is my own work and that it contains no material previously published for an award of any degree in this university or any other university. All references made to other studies have duly been acknowledged.

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ABSTRACT

Illegal mining, a kind of mining accompanying artisanal and small-scale mining, is done without adherence to good environmental protection practices and mining regulations. Just like every other mining activity, it has a direct correlation on social factors like education, health and the general well-being of the youth of Ghana. In the light of the above, the pushing factors that are causing this upsurge coupled with the increasing interest of the youth in engaging in it and its effect on their education in the Municipality is something worth considering. The study through the qualitative approach explored the phenomenon, using sampling techniques like purposive and convenience sampling to select 45 youth (boys and girls) and other 7 adults who also have knowledge as far as illegal mining is concerned to elicit information from them through interviews. This information in addition to those from relevant educational institutions were analysed. Data analysis revealed that poverty and unemployment are the major reasons for which most of the youth go into illegal mining business. Beside these factors, some youth also venture into illegal mining as a way of getting money to support their education. This, however, comes along with a big toll on their educational advancement as they frequently absent themselves from school in the process and consequently a drop in their performance. The study therefore recommends that mining communities through the collaborative and inter-sectoral approach involving all the stakeholders should counsel and empower the youth on the need to pursue education to the highest level. In addition to that, there must be alternative livelihood support programmes to enable the youth to exit out of the illegal mining with the hope of a sound educational footing.

DEDICATION

I wish to dedicate this work to my maker, the GOD and creator of the universe, who gave me the breath of life, strength and knowledge to go through this study successfully, indeed it is HE who began the good work has given it a successful finish. Secondly, to my children especially, NANA AMOAH-KRODUA NYAME-ASEDA ASARE and all my love ones for the inspiration and morale support.

ACKNOWLEDGEMENT

I am extremely grateful and thankful to the Almighty God for His inspiration and full protection upon my life that led me throughout the academic duration successfully. He alone deserves to be praised in JESUS name.

I am also grateful to Dr. Ernestina K. Dankyi for her patience, guidance and supervisory advice as far as this study is concerned. In addition to that, I acknowledge the supportive roles of the other staff of the Centre for Social Policy Studies (CSPS), University of Ghana for their contributions towards the success of this final write-up, not forgetting Konrad Adenauer Foundation, GOD bless you all.

Lastly to the Masters class of CSPS, 2017/2018-year group especially, H.Krapa, and Asare A. Emmanuel for that peaceful coexistence and support. I will not forget to appreciate the unflinching support from Stephen Kotochie and the inspiration from Miss Lady OLIVIA TORMEKPE during the course of study and the writing of this work, I love you all.

TABLE OF CONTENTS

CONTENT PAGE

DECLARATION	i
ABSTRACT.....	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
CHAPTER ONE	1
INTRODUCTION	1
1.0 Background	1
1.1 Statement of Research Problem	6
1.2 Research Question	7
1.3 Research Objectives	7
1.4 Justification of the study	8
1.5 Organization of the study	10
CHAPTER TWO	11
LITERATURE REVIEW	11
2.0 Introduction	11
2.1 Education	11
2.2 Linking the SDGs, Education and Mining	15
2.3 The Youth	16
2.3.1 Changing paradigm of youth work	17
2.4 The Nexus of Artisanal & Small-Scale mining and its illegality	19
2.5 Causes of the Increasing youth involvement in illegal Mining	21
2.5.1 Poverty	21
2.5.2 Unemployment	22
2.5.3 Displaced of indigenes from their lands	22
2.5.4 Lack of clear-cut legislation and bureaucracies	23
2.5.5 Economic viability of illegal mining	24
2.5.6 Push and pull factors of engagement	24
2.6.1 Effects of illegal mining on the education of the Youth	25

2.6.2 Other effects of illegal mining	27
2.7 Conceptual framework	28
CHAPTER THREE	32
METHODOLOGY	32
3.0 Introduction.....	32
3.1 Study Area and the Study site description.....	32
3.2 Research Paradigm and Philosophical foundations.....	34
3.3 Research Design and Methodology	35
3.4 Population.....	37
3.5 Sources of Data and collection	37
3.6 Sampling Techniques.....	38
3.7 Preparatory stage.....	39
3.8 Data Collection.....	39
3.10 Data Management and Analysis	40
3.11 Ethical consideration	41
3.12 Limitations of the Study	41
3.13 Summary.....	42
CHAPTER FOUR.....	43
FINDINGS AND DISCUSSIONS.....	43
4.0 Introduction.....	43
4.1 Socio-Demographic characteristics of respondents	43
4.1.1 Adult respondents	44
4.1.2 Youth respondents	45
4.2 Work done by youth involved in illegal mining activities	49
4.3. Causes of illegal mining	52
4.3.1 Poverty	52
4.3.2 Unemployment	53
4.3.3 Lack of social support and irresponsibility	54
4.3.4 Undue Influence by Friends and Families	55
4.5.1 Decrease in academic performance	56
4.5.2 Effect of illegal mining on enrolment	60
4.5.3 Effects of informal mining on school drop-out.....	62

4.5 Dwindling interest in Schooling	67
4.6 Regulation of illegal mining activities	68
4.7 The attainment of SDG 4 in the wake of illegal mining	69
4.8 Discussion	71
4.9 Conclusion	73
CHAPTER FIVE	75
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	75
5.0 Introduction	75
5.1 Summary of Research Findings	77
5.2 Conclusion	80
5.3 Recommendations	81
5.4 Policy implication	83
REFERENCES.....	86-93-
APPENDICES	93-
QUESTIONNAIRE.....	98
INTRODUCTORY LETTER.....	99

LIST OF TABLES

Table 4. 1 Socio-demographic background of respondents.....	45	44
Table 4.2 Age Category of Youth respondents.....	48	47
Table 4.3 Years of youth involvement in illegal mining	51	49
Table 4. 4 Effects of illegal mining on performance according to respondents	60	58
Table 4.5 Effects of Mining on school drop out	65	63

LIST OF FIGURES

Figure 4. 1 Gender of adult respondents.....	46	Error! Bookmark not defined.
Figure 4. 2 Type of Respondents by gender	48	46
Figure 4. 3 Level of education to start the illegal mining	49	48
Figure 4. 4 Performance in BECE by Mining and non-mining community schools	61	59
Figure 4. 5 Primary 1 to JHS 3 enrollment	63	Figure
4.6 Dropout rates for 2015 class of boys and girls in public schools in East Akim Municipal (2006-2015).....	68	66

LIST OF ABBREVIATIONS

ASM	Artisanal and Small-scale mining
BECE	Basic Education Certificate Examination
CASM	Communities of Artisanal Small-Scale Mining
CMP	Community Mining Project
CSR	Cooperate Social Responsibility
EAMA	East Akim Municipal Assembly
EFA	Education for All
EPA	Environmental Protection Agency
fCUBE	free Compulsory Universal Basic Education
GES	Ghana Education Service
GCM	General Circulation Model
GoG	Government of Ghana
IMCIM	Inter-ministerial Committee on Illegal Mining
ILO	International Labor Organization
JHS	Junior High School
SDGs	Sustainable Development Goals

SHS	Senior High School
SSM	Small-scale mining
MDGs	Millennium Development Goals
MMIP	Multilateral Mining Integrated Project
MoE	Ministry of Education
NYA	National Youth Authority
NYEP	National Youth Employment Program
NABCO	Nation Builders Corps
RMI	Responsible Mining Index
STEP	Skills Training and Employment Placement
UNDP	United Nation Development Program
UNESCO	United Nation Education and Cultural Organization
UNICEF	United Nation Children's Fund

CHAPTER ONE

INTRODUCTION

1.0 Background

The prospect of education turns to be under siege with the advent of illegal gold mining activities in certain parts of the country. During this era of development, any dwindling impacts on the educational standards become a tool that is very important but missing in the development tool kits box which is of great concern to all development partners especially those in the education sector. There are several opinions on the causes of the falling standards of education. Hilson and Banchirigah (2009) indicated that demographic factors, poverty, lack of priority for education by governments, and inappropriate mix of government educational priorities, mines, construction or other hazardous activities are some of the reasons for non-achievement of the educational goals in developing countries. In addition, Owusu and Dwomoh (2012) suggested that illegal mining activities in mining communities could account for the falling standards of education of the youth, particularly in those communities and other parts of the country.

According to Berger (2008) and Airo (2010) Ghana is recognized as the second largest gold producer in Africa after South Africa, with Gold accounting for over 40% of its total export earnings. Gold production in Ghana from Artisanal Small-scale Mining (ASM) and illegal mining activities has risen tenfold and doubled since 1989 accounting for an estimated contribution of \$461.1 million to the national economy since 1989 (Yakubu, 2000). This figure represents 2.2 % share of ASM in the production of gold as at 1989 but this increased to 34 % amounting to 1,423,453 ounces in 2012 (Minerals and Mining Policy, Minerals Commission, 2013). Ghana is an undisputed mining hub of West Africa, with a contribution to the GDP rising from GH 497

million in 2006 through GH 2,458 million in 2014 to GH 3,606 million in 2018(Ghana stock exchange, 2018; Ghana trading economics,2018). The sector is dominated by two main gold mining sectors: the large-scale mining sector (LSM) and small-scale or artisanal small-scale mining (SSM/ASM). The term Small-Scale mining and Artisanal mining is used interchangeably to represent formalized mining in small quantities.

According to the Institute of Statistical, Social and Economic Research of the University of Ghana, Aryee et al,(2003) defined Artisanal small-scale mining in Ghana as the exploitation of mineral deposits using equally simple tools and/or at low levels of production with small amount of money.(*The state of the Ghananaian Economy in 2016, 2017*). Alongside the Artisanal small-scale gold mining is the informal type referred to as ‘galamsey’. “Galamsey”, a local term used in Ghana for free-range unregulated gold operations sometimes through illegal means, hence the name illegal mining. Generally, it thrives in the southern part of the Ghana where there are considerable reserves of gold deposits, usually within or around the hinterlands of the larger mining companies. Currently there are about 14 million people in more than 30 countries in the ASM sector. Furthermore, another 80 to 100 million people depend on the activity for their livelihood. Studies have shown that, for most, because of the conditions in which they live, even in the midst of abundant mineral resources, mining has become an activity undertaken mainly for survival. In Africa, existing research reinforces such claims (Hilson, 2012; Hilson & Garforth, 2012; Tschakert, 2009).

While the monitoring context of the ASM sector seems to have improved over the years, the issue of ‘galamsey’ remains because of the governments have failed and or not willing to improve the services in the production and to redirect miners’ skills toward other profitable professions (Hilson & Potter, 2003). Ghana’s World Bank in 2008 report suggested that Scholars

who study Ghana's small-scale mining sector habitually blame a lack of effective law enforcement capacity for the state's informal mining problems (Hilson, 2002b; Hilson & Potter, 2003; Kuma & Yendaw, 2010); World Bank, (2008).

Illegal mining activities have dire consequences including loss of lives, depletion of forest reserves, and pollution of water bodies, degrading of the fertile and arable lands among others to the nation. However, its effect on education, particularly among the youth, cannot be overemphasized. . Owusu and Dwomoh (2012) indicated that illegal mining activities have been affecting standard of education among the youth in the communities and as such reducing enrolment in Ghanaian Schools. Again, illegal mining appears to be a major block to achieving its sustainable development goals in education. This was disclosed at the Quadrennial District Delegates Conference of the Ghana National Association of Teachers (GNAT) held at Ho in the Volta Region of Ghana. It came into light that some school children are involved in artisanal small-scale gold mining in certain parts of Country. The Ghana Living Standards Survey Round 6 puts the percentage of children working in mining and quarrying at 7,428 representing 0.3% of all working children (GSS, 2014:28).

Ghana's Millennium Development Goal (MDG) 2; to "ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling". It specifically targeted improvement in literacy rate of 15-24 years-old women and men. Without doubt, this target was not fully achieved. Some evidence of this is manifested in mining communities due to engagement of the youth in illegal mining activities. Even though, the country has made considerable progress, the education sector still faces several challenges in

making the transition from MDG 2 to SDG 4 (Sustainable Development Goal) 4 which aims to ensure that there is inclusive and equitable quality education to promote lifelong learning opportunities for all by the year 2030.

In spite of the initiatives like the UN and the ILO conventions on the right of the child and the minimum age admission for paid employment, Gibbon et al(2003)stressed that children's engagement in mining and other related work are linked with higher repetition in class, and lower completion rates and bad performance. A study by UNDP Ghana (2016) reveals that some of the children at the mining sites are less than seven years, even though the average age of entry is between 11 and 15. Some school- going children in mining have been in it for as long as 10 years. It was found that 28.3% to 30% of child miners in Wassa and Talensi areas took care of themselves in school they cannot get the needed support from the family and close relatives. A downward impact on schoolchildren in mining is that they do not attend school regularly, cannot combine school and learning effectively, their academic performance becomes adversely affected, and they sustain injuries at the site.

Furthermore, a research conducted in the then Brong Ahafo Region, has revealed that small-scale illegal mining has affected the performance and attendance of pupils and students in primary and junior high schools in the area (Ankutse, 2016). He noted that, galamsey activities were taking most of the students from the classroom and if care was not taken it would have serious repercussions on the children's future. He noted in a similar research that, even though only five students of out forty-four passed the 2011 BECE at Kenyasi, a community in the Brong Ahafo, the final year students preparing to write the 2012 BECE also refused to write the Mock exams and exempt themselves from class in order to engage in illegal gold mining. In another

development, it was reported by the Ghanaian Times newspaper on August 13 ,2019 that, Mr Robert Asomaning, the Chief Director of Education in Upper West Denkyira agree that ‘‘illegal mining (or galamsey) has disrupted education among children such that many schoolchildren are not enthused about going to school as they prefer going to these galamsey sites to make some money .He therefore urged parents to do more with regards to changing the mindsets of their children by highlighting on the significance of education’’

Recent upsurge of illegal mining in the country, particularly among the youth suggests that transitioning to SDG 4 will be very challenging if care is not taken. This is because most of the youth and children in mining communities do not value the importance of education; hence, are likely to choose ‘galamsey’ over their education. It was revealed in the report that, many children of school going age have abandoned classrooms and are now engaged in full scale illegal mining activities, primarily for the cash benefits that come with these activities, despite the associated risks. In response to this and the rising effects on the environment, the Government of Ghana placed a ban on small scale mining activities in the country and declared a war on Illegal mining in August 2017. This action resulted in the creation of ‘Operation Vanguard’ taskforce mandated to check and stop all forms of small scale and illegal mining activities. The jungle move was a necessary response to the number of problems posed by the sector.

However, the situation persists in some parts of the country. At the Multi-sectoral Mining Integrated Project (MMIP) summit, the world Bank disclosed that, the government of Ghana has so far spent 20 million US dollars on the activities of ‘Operation Vanguard’ task force since it was set up (Ghanaiantimesonline,2017).However, this move was described by the World Bank as ‘‘ineffective and unsustainable’ since the activity still persist in some part of the Country. The

World Bank as a result pledged \$50 million to support the government in rolling out a more effective approach.

According to the World Bank ‘improved levels of education and more mobile labour force would result in better job opportunities that can help curb the desire to engage in illegal mining.

1.1 Statement of Research Problem

Even though the contributions of the Youth, Mining and Education on national development is quite significant. As one of the employment avenues resorted to by people including the youth, informal (illegal) mining activities, is having a dire consequence on the physical and social environments. These include loss of lives, depletion of forest reserves, and pollution of water bodies, degradation of the fertile and arable lands as well as the pollution of water bodies among others to the nation. Additionally, its effect on the education of the youth cannot be overemphasized. The situation is not uncommon to other fields of engagements such as farming, fishing, Diaspora artisanship and mechanized businesses but the case of mining and illegal mining has been at Centre of attraction in recent times. A lot of light has been on children who engage in illegal mining activities alongside schooling in order to be able to pay their own school fees.(Eners.2014) This may be due to the tedious nature of the work and again its associated child labor occurrences which is also linked to the toll it has on education.

According to the UN report on sustainable development goal on education, ‘103 million youth worldwide lack basic education’. The sinking standards in education have been an issue of interest for all partners who have stakes in education. There are several views on what is causing the falling standards of education, whilst some blame teachers for not putting in the necessary effort; others think absenteeism on the part of students is the problem. Another school of thought

believes that both parents and students do not pay attention to education which all account for these levels of school's performance. The school's performance is not taken into consideration by Civil Society Organizations (CSOs), Non-Governmental Organizations and other related stakeholders as it should be. Again, it is believed that parents are too apathetic and irresponsible. Parents who are unable to provide the educational needs of their wards in their bid to vindicate themselves push the blame to the financial constraints and the inability of Governments to stimulate financial growth and economic empowerment in the country.

If these practices persist, then Ghana is likely not to achieve the 2030 SDG 4, that is 'to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'.

The bilateral repercussion of education and mining has been mutually beneficial, but the adverse effects of illegal mining seems to over-shadow the former. In spite of the significant function that the small-scale mining activities play in district and the country as a whole, the worsening effect that illegal mining has on school attendance and academic performance cannot be overemphasized and stakeholders have paid little or no attention to the effect illegal mining activity has on education of the youth. It has therefore become a critical concern to look into the effect of the illegal mining activity on the education of the youth.

1.2 Research Question

The main research question for the study is: What are the effects of the youth's active engagement in illegal mining activities on Ghana's commitment to achieving 'the Goal 4' of the SDGs in the East Akim Municipality.

1.3 Research Objectives

The general objective of this study is to examine the effect of illegal mining on the education of the youth in East Akim Municipality of Ghana.

The specific objectives are;

- To examine factors which have contributed to the increasing interest of the youth in the illegal mining activity?
- To determine the effect of illegal mining on education of youth in the Akim municipality of Ghana.

1.4 Justification of the study

Many studies have been conducted on the social and economic importance of mining on a broader note without given specific attention to educational benefits and where it is of secondary importance. There are also write-ups concerning the impacts of illegal mining and its effect on the people involved which include the youth without given much attention to their education. The uniqueness of this study is the fact that it gives more priority to the impact that illegal mining activities have on the education of the youth. The significance of the study will be multi-dimensional – contribution to literature and theory; and implications for policy and practice.

First and foremost, the findings and recommendations resulting from this study will significantly contribute to new areas in the growing body of evidence and literature on the socio-economic effects of illegal mining. The study will assess the existing policies and arrangements in education in the wake of rising illegal mining activities in East Akim Municipality and the extent to which the area has relied on these arrangements to change the level of education among the youth. The study will draw out strengths and weaknesses that will serve as a basis for further discourse.

Using the youth as epitome of this study can be justified because, the youth, even though constitutes the largest percentage in the population of Ghana are normally relegated to the

background in terms of decision making and policy formation concerning the youth (Adu-Gyamfi, 2013) and development planning (Gyampo & Odoom, 2013). This study can be a wakeup call on the need to involve the youth in decisions concerning the youth

Then also whether in school or completed, the outmost wish of the youth at which ever age they find themselves is to get employed in every available job including informal (illegal) mining. Age is the easiest way to define this group, particularly in relation to education and employment, because 'youth' is often referred to as a person between the ages of 15 and 35 who leaves compulsory education and search for their first job. (A/36/215, para. 8 and 19 of the annex)

Occurring as the largest percentage in the youth age groupings, the age range between 15 and 24 years is deemed necessary for consideration as a category in this study. This would among other things show the way leading to the discovery of the minimum and maximum youth-age ranges required for their engagement or employment.

Lastly, one of the key facts of the SDG 4 which were framed during the 2015 UN conference was that, children from the poor household have twenty-five percent higher chances higher to be out of school than those of the richest households. Sustainable development goal four aims at providing equal accessibility to affordable vocational training to *eliminate wealth disparities* and gender and achieve universal access to quality higher education. Education and artisanal small scale (and its illegal) mining sectors been key sectors for alleviating poverty (through wealth creation) needs critical considerations to prevent conflicts of interests. Just as (Hilson, Child Labour in African Artisanal Mining Communities: Experiences from Northern Ghana, 2010) indicated that, education and

children working in mining site are opportunity cost for the two activities with one supporting the other

The outcome of this study can give much insight about the existence of illegal mining in some Ghanaian communities, its detrimental effects on the education of the youth who are schooling and engaging in the illegal mining activity and assist the stakeholders to holistically address the challenge.

The study will have implications for practice at various levels – national and sub-national level encompassing different stakeholders, with possible amendments to existing mining Acts and educational policies.

1.5 Organization of the study

This study is structured into five chapters. Chapter one provides general introduction, and this will cover background of the study; statement of the problem; research objectives, research questions; significance of the study; scope of the study; and organization of the study.

The second chapter focuses on the literature review and it covers theoretical and conceptual frameworks, definitions and explanations emanating from conceptual, empirical and anecdotal evidence. Chapter three covers research methodology and the key elements are the research design; methodology and methods; study population; sampling techniques; sample size; sources of data; instruments, methods of data collection and justification for the choices; analysis; research ethics and conclusion. Chapter four is centered on the collection and representation of the data while the last chapter covers the summary, conclusions and recommendations as well as some policy implications.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the literature on the concept of education, the youth, vis-a-vis their work in Ghana. It considers the various discussions on mining, including artisanal mining and illegal mining. It also takes a look at the link between the tenets of development like education, the youth, their various engagements and the attainment of the nation's development prospects, in the wake of their rising interest in the peripheral (illegal) mining industry

2.1 Education

Generally, education is considered as the process of assisting learning or obtaining values, knowledge, skills, beliefs and habits formally or informally.

Education is therefore all the experiences that an individual goes through that exposed him to various skills and abilities which enable him to live meaningfully in the society (Owusu, 2003)

The Education Act 778 (2008) also has the goal of providing, for the establishment of an educational system intended to produce well balanced individuals with the requisite knowledge, skills, values, aptitudes and attitudes. In this regard, Ghana has ascribed to many of these international commitments which include; Education as a fundamental right, Ghana was among the first countries to ratify the United Nations Convention on the Rights of the Child (CRC) in February 1990. Thus, Ghana has pledged its commitment to ensure that all children are given the opportunity to exercise this right.

The Constitution of the Republic of Ghana (1992) Article 25 (1) states that all persons shall have the right to equal educational opportunities and facilities, with a view of achieving the full realization of that right: basic education shall be free, compulsory and available to all (fCUBE), The Education Act 778 (2008) also has the goal of providing, for the establishment of an educational system intended to produce well balanced individuals with the requisite knowledge, skills, values, aptitudes and attitudes.

The Education Strategic Plan (2010-2020) also promotes the provision of equal opportunity for all children in terms of education without any discrimination.

Aristotle once said, ‘the roots of education are bitter, but the fruit is sweet’. In reasoning with this statement, Kofi Annan, a former UN Secretary General also acknowledged that “Knowledge is Power”. ‘Information is liberating. Education is the premise of progress, in every society, in every family’. In these regards, it can simply be concluded that, the trajectories of education though rough, the result is much rewarding.

The importance of education for a safer, healthy, more prosperous and environmentally sound world and for social, economic, and cultural progress, tolerance and international cooperation cannot be over-looked. This help to instill communal spirit into the children to leave in harmony with others and to prepare and do extra for their communities. In this regard, the youth and children are trained to behave in the right moral principles and religious beliefs, be honest and incorruptible in both private and public life, the children are taught to protect their culture and the environment and not to destroy it.(Owusu, 2003).

Through education, students are trained in basic skills of reading, writing, number and speech to be able to express themselves both orally and on paper. (Owusu, 2003)considering the fact that complete basic education is essential to reinforce higher levels of Scientific and technological

advancement. Access to higher education, makes people ready with the suitable relevant vocational skills to be able to earn their living and lead a worthy life that is economically self-reliant.

The concept of Education for All declaration seeks to provide child, youth and adult with skills and development opportunities in the early stage of development for primary or equivalent out-of-school education for children, and training activities for youth and adults (Buchert, 1995).

Several commitments have been made nationally; among them is the Education Strategic Plan (2018 – 2030) from the Ministry of Education (NDPC, 2018). The Free Compulsory Universal Basic Education (FCUBE) policy has enhanced the completion rates at the Junior High School (JHS) level (Osei-Poku & Kootin-Sanwu, 2019).

The Government of Ghana (GoG) in its quest to ensure an increased access to quality education, especially among the rural poor, expanded the Free Education policy to encompass the secondary level in the 2017/2018 academic year. Consequently, the number of Ghanaian youths who truncated their education after the basic level due to poverty has been drastically reduced. Only in its second year of implementation, the turnout of the Free SHS policy has led to the double track (shift) system to accommodate the numbers as there is limited infrastructure in the second cycle schools.

In addition, Polytechnics have been upgraded to Technical Universities (Chidiebere, Uchenna, & Kenechi) Teacher training colleges of education are now a 4-year degree certificates awarding institutions with mandates to train hands-on graduates through a competency-based training (CBT) system for the supply of all schools and industries in Ghana with the needed qualified

professionals. (National Council for Tertiary Education, 2014) are all roadmaps towards youth development.

Educational quality can be promoted by factors including classroom instruction, good school management practices and adequate educational facilities. Studies by (Hanushek, 1986, 1996) for developed and developing countries indicated the performance of a school is dependent on the facilities in the school. In addition, pupil-teacher ratios and relationships, pupil-school facilities ratios (i.e. school library, laboratory, sports facilities) and government policy, are all good means of promoting quality education (Elly, 2015)

Raymond (1968) on the other hand had a different view, on his part; argued against the fact that education quality is promoted by good educational policy that gives value to the provision of good remuneration and professional standards for teachers. Instead, he said that, logistics may or may not yield to educational quality. Second, there are no practical evidence for the argument that suggest that high teacher's salary contribute to quality education but external homegrown factors replicating socioeconomic characteristics of the communities in which the school systems were located-were observed to have a significant effect upon quality of education,(Raymond, 1968)Some school-going youth in their quest to climb higher on the educational ladder sometimes venture into different type of work located in their communities including mining (legally or illegally) to be able to support the cost of their education . Owing to the reason above, the nature of activity that goes on in and around the school like illegal mining in the East Akim Municipality of Ghana can make or mar the quality of education in the area.

2.2 Linking the SDGs, Education and Mining

There are greater links between the SDGs, education and mining, this manifest itself in many areas as in the fact that, donors and development professionals interested in addressing any of the MDGs will find that typical ASM communities offering direct access to some of the very populations whose standards of living per the targets of the MDGs designed to improve are on track. Poverty reduction, reduced hunger and quality education were cited as a compelling goal upon which to integrate ASM into the existing international development framework

The essence of education has earned it a center-stage in the priority list of many corporate bodies and civil society organizations including the UN, World Bank and UNESCO. Education is seen as significant to the achievement of all the other goals (UNCG/CSO, 2017).

The SDG 4 amongst other things accentuates on an all-encompassing and fair education and the promotion of all time learning opportunity for everybody has many connected targets such as ensuring that all boys and girls (youth) do complete free and quality and equitable primary and secondary education leading to appropriate skills in technical, vocational as entrepreneurship by 2030(UNDP,2015).

Most of the targets of the SDGs indicate greater intercourse and collaboration between all the sectors for a better result. These included addressing the root causes of Poverty and universal need for development that works for all people (UNDP, 2015). The “Responsible Mining Index” (RMI, 2017) of accompanying these development goals ensures that the objectives can be reached through the input of minerals and metals, which are fueling the manufacturing sector and creating jobs and value added along the supply chains of material goods and impact positively on society in term of quality, education, climate action, good health, clean water (UNDP,2015).

In linking the SDGs, Education and mining, a consideration for education as one of the key institutions or organizations in communities where illegal mining activities are taking bigger tolls on the education of the youth and children. However, cooperate social responsibilities of registered ASM/SSM binds them to build schools and undertake educational initiatives. According to the Journal on the Sustainable Development Goals-A Review of Ghana's state, Ghana's education, just like other parts of world, is seen as central to the achievement of all the other goals(Poku& Sanwu, 2019). This is because, the more enlightened a society is, the better its chances getting employed, increasing income and reducing poverty and diseases. Accordingly, plans have been put in place to provide access to quality education at all levels in the country.

In June 16-17, 2005, the World Bank conference on millennium development goals dubbed "*Forging Partner for Action*", which was held in Washington, D.C. by Communities for Artisanal and Small-Scale Mining (CASM), concentrated on the artisanal and small-scale mining (ASM) sector, to promote the importance of the sector in the development agenda such as the MDGs which were key for developing countries(UNDP,2015).

2.3 The Youth

The Youth make up the nation's wealth and represents the major source of human capital in every country. It is therefore imperative to ensure their continuous advancement in societies.

The 1981 United Nation international youth report for statistical purpose defined Youth as the changing period in which dependence children (between the age of 15 and 24) turn into to independent adults. The General Assembly Resolution A/RES/56/117 in 2001, the Commission

for Social Development resolution E/2007/26 & E/CN.5/2007/8 in 2007 and the General Assembly resolution A/RES/62/126 in 2008 also reinforce the same age-group for youth.

The African Youth Charter and the Ghana Youth Authority referred the term “youth” to those young men and women between the ages of 15-35 years as defined by Ghana’s 2010 National Youth Policy (MoYS,2006)

The population of Ghana which represent 0.38% of the world’s population, and ranks 48th on global league table of countries by population size (United Nations Department of Economic and Social Affairs Population Division, 2017) currently comprise of 40% of persons between the ages of 15 and 24 (Ghana statistical Service,2017). Ghana’s total population of 28 million in 2017 with a growth rate of over 3% is youthful due to the low death rate and high birth rate (Ghana Statistical Service, 2012).

The youth today will become the largest group (UNESCO 1999) who will steer the affairs of the world when they grow, there is need to support any members of this generation, on the street, youth at mining sites, in the “ghetto” to flee the poverty situation other than this will risks future economic and societal development.

2.3.1 Changing paradigm of youth work

The type of work in which most youth are engaged in recent times has become subjected to changes with respect to places and time. These days labor force mobility seeks to clarify the dimensions of the youth employment problem by examining the distribution of unemployment and related patterns.

This is very common in developing countries where few social services exist with plans and alternative livelihood support programs for the youth who have lived or worked on the streets or at mining sites.

The private sector's failure to engage the growing number of youths who are not working particularly in developing countries, as expected by neoclassical policies, its critics have made calls to the government for the creation programs to provide direct jobs since the Government is the last resort employer who is supposed to solve the unemployment problems (Acheampong, 2019).

Policy makers as a way of engaging the out-of-school youth, the Unemployed and the Under-employed youth institute ad-hoc job initiatives and programs that will prepare, develop the youth for self-employment and wealth creation and for global market. According to K. B. Clark et al. (1979), the high rates of joblessness have been a source of concern to both economists and policymakers. He buttresses this by saying that, 'expansionary aggregate demand policy' of a full employment economy is the only proven way of widening the job avenues for youth.

The dynamism of youth employment is characterized by designing, training and equipping the youth with necessary skills, matching skills with available jobs and creating jobs for the youth. As a result, successive Governments of Ghana have as a policy rolled out initiatives to enable many of the youth to be employed temporary.

In the past two decades, various efforts have been made by successive governments in the quest to create jobs for the youth, reduce unemployment and underemployment. These included the Skills Training and Employment Placement (STEP), National Youth Employment Program (NYEP), and the national Youth Fund (NYF) through which micro-credit were provided to

finance small-scale enterprises. About, 950,000 high school and technical and vocational school graduates as well as school dropouts and illiterate youth(Attipoe-Fittz, 2010)were engaged in 2006 for a two years period (NYEP,2006:3).

The program comprised a Ten-Module Youth Employment Program in two stages, first to create employment for the youth in areas of economic and social benefit.(Ofei-Aboagye, Thompson, Al-Hassan, Akabzaa, & Ayamdo).

In January 2009, the then government included four more modules to the program to enable the youth work in fields like afforestation, Mobile Phone Repairs, Sachet Water Production and Bamboo Processing(Attipoe-Fittz, 2010).

Another seven employment models for the youth called the Nation Builders Corps (NABCO) was reintroduced in 2017 to provide jobs to about one thousand unemployed tertiary school graduates to work in both the private and public sectors to build their skills and promote socio-economic growth in the country(Ghana National Youth Authority,2018).

2.4 The Nexus of Artisanal & Small-Scale mining and its illegality

There are basically two major types of mining in the Ghanaian mining industry: Large scale and small-scale mining (Agyapong, 2010). Large scale mining may include surface mining approach or alluvial mining at a point in time in large quantities. Hentschel, Hruschka, and Priester (2002) broadly defined ASM as mining by individuals, groups, families or cooperatives with minimal or no mechanization, often in the informal (illegal) sector of the mining industry based on the method of extraction, the equipment used and the type of labor , using simple tools(Aryee et al.,2003)with a small capital requirement often characterized by artisanal practices(Buxton, 2013; Ferring, Hausermann, & Effah, 2016; Hentschel et al., 2002).

Likewise opening the construct of 'small-scale', widening our viewpoint on (il)legality also exposes distinctions which otherwise will be missed when only focusing on the dual classification as produced by the law or cannot fit into the legality(frame) of the law. There are also a lot of cohabitation and tributary deals with hybrid owners agreeing on percentages in the output. However, the law is silence on them because these conventions cannot be placed within the legislative framework and be classified as either legal or illegal.

Under the Act 256(6) of the 1992 constitution, all minerals in their natural state within the boundaries of Ghana (found in land or underwater bodies) belongs to the state, presided over by the President who shall appoint a Minister to supervise its exploration and issue out Mineral rights with the guidance of the Mineral and mining Act, 2006 (Act 703) legal framework. The law also permitted the establishment of commission to issue out mineral license to people for surveying, prospecting and exploration purposes.

Mining laws and ordinances were formulated as and when problems arose to ensure that the problems do not resurface. However proper plans for sustainable resolutions was not considered and recent conflicts, illegal mining activities, and the increasing interest of the youth in the activity are clear evidences.

In view of the socio-economic benefits of the mining minerals at various stages of prospecting, extracting, exploration, refining, recycling, transportation, and final sale of the minerals resources continue to yield good results such that both the Government and other external bodies like IMF create enabling environment for the sector to thrive and provide support to enhance the socioeconomic development (UNDP, 2003).International Monetary Fund (IMF) Structural

Adjustment Programs (SAP's) and Economic Recovery Program (ERP) engrossed on export-led growth. Upon the advice of the IMF, Ghana relaxed mining regulations and reduced investment by the mining industry through generous incentives and tariff reduction during the mid-1980's (World Bank, 2001) but this has been detrimental to the other sectors of production.

This bearing between mining and our social development though prosperous, have also been devilled by some militating factors that are always thwarting this fruitful intercourse among these parameters of development. Over the years, connection though arguably unclear, necessitated several legitimate enactments and policies which were meant to curtail social problems like absenteeism, school drop-out and poor academic performance in the youth's educational endeavors has paved way for 'galamsey'.

2.5 Causes of the Increasing youth involvement in illegal Mining

There are several reasons underpinning the heightening interest of the youth in the illegal mining business are numerous but few of these include poverty, unemployment and as an alternative means of engagement among others.

2.5.1 Poverty

Many youths of today decide to be in illegal mining as a result of the financial hardship they find themselves in, therefore as a means of making ends meet, they venture into the "galamsey".

Poverty is defined by UN committee on Economics, Social and Cultural Rights as a condition of human branded by sustained or chronic deprivation of choices, abilities, resources, safety, and power needed for advancement and enjoying in a standard of living that is good in addition to other associated rights. (UNDP, 2002)

Banchirigah (2008) has said that, the most widely accepted reason for the upsurge of illegal mining is nationwide poverty (Barry, 1996; Labonne, 2003), even though policymakers often argue differently that, it is ‘opportunism’ and people’s desire to ‘get rich quick’ that forced young people into illegal mining activities. Scholars like Barry, (1996), Hilson and Pardie,(2006) have all indicated small-scale mining is obsessed by poverty(ISSER,2017).

2.5.2 Unemployment

Youth unemployment has been of great concern to governments. K. B. Clark et al. (1979)of Harvard University and Massachusetts Institute of Technology and with the National Bureau of Economic Research in their write-up titled, “Labour market dynamics and youth unemployment” indicated that at any given moment almost 2 million teenagers aged 16-19 are unemployed and as indicated by Kala in ISSER(2017:200).In Ghana about 15.9% of the youth aged between15and24 years, and 32% of people between 25 and 44 whilst about 45% of people aged 45 and 64 are unemployed(Edudzie, 2002). Scholars like (Hassan, Lass, & Makinde, 2012; Okeshola & Adeta, 2013) have also added that a high rate of unemployment brings about lots of criminal activities and illegal mining is one such activities. Significant unemployment has fueled the rapid and often chaotic expansion of “galamsey” operations in many parts of the country. People who are unemployed end up at the mining sites in their quest to find jobs and when this does not materialize sometimes due to the lack of technical know-how, the job-seeker resorts to illegal mining at the corridors of the mining companies.

2.5.3 Displaced of Communities from their lands

When people are displaced and deprived after the family land or other properties is taking over by registered mining companies which cannot employ them, they resort to illegal mining.

According to Sapring, (2006), about forty thousand inhabitants were reported to have been displaced from 1990 to 2006 at Tarkwa. And Ahafo South by large scale gold mining companies like Newmont Gold Company. Meanwhile, the country's largest gold producer, AngloGold Ashanti, employed only 9313 people in 2006 (AngloGold Ashanti, 2006, p. 15), Bank of Ghana estimates indicate that the formal mining sector only employs 15,000 people (Bank of Ghana, 2003). The operation does not allow the communities to income-generating activities, so the only alternative means of survival for these remaining indigenes that have lost their land and jobs is to engage in the illegal mining business. According to Gavin Hilson,(2010), Other pull factors such as risk aversion where people consider it as an alternative way of surviving. Branching-out into nonfarm income activities has shown to be a good way of reducing income variability and improving earnings. (Hilson, 2010)

2.5.4 Lack of clear-cut legislation and bureaucracies

The government has not been able to regulate and reduce illegal artisanal mining activity largely due to the absence and proper implementation of defined and clear-cut policies to guide operations. However, these policies and laws have been ineffective and insufficient even for registration of prospective miners, the application processes have rather become too bureaucratic (Hilson & Potter, 2003). These discourage individuals from tendering-in for the necessary documentation.

Small-scale gold mining laws like the Mercury Law, and the Precious Minerals and Marketing Corporation Law enabled any individuals above 18 to acquire a mining license (Aryee, Ntibery, & Atorkui, 2003). The mining laws indirectly permits both illegal and legal miners to transact business in the sector without any obstacle (Hilson & Potter, 2003), thus indirectly, it does not discriminate between illegal and legal ASM parties when purchasing gold.

Besides the length of delays in the process there also few concessional slots available, as Hilson and Potter (2005) point out, there is often long waiting periods and mass bureaucratic processes that applicants must go through before securing a license discourage many people from using legal means before engaging in the act.

2.5.5 Economic viability of illegal mining

The output and the soaring prices of gold since 2014, has always been lucratively appealing hence the mass patronage by many Ghanaians including the youth.

Illegal mining provides financial assistance to Farmers, traders, businessmen, and even some politicians for survival. The precious mineral marketing company employs over 700 procurement agents (Hilson & Potter, 2003). The rapidly growing “galamsey” segment has generated significant returns, to the point whereby 2003, Between 1989 and 2003 the output from ASM and illegal mining contributed between 2.2% and 34% of the country’s gold total yield (Mineral Policy, Mineral commission,2013)

2.5.6 Push and pull factors of engagement

Besides the pull-factors serving as baits, there are other non-friendly features inside or outside the school setting that becomes points of disengagement or engagement to the student- youth as they find their way out of the classrooms to the mining fields.

According to Fredricks, Blumenfeld, and Paris (2004), the absence of certain (behavioral, Emotional and , cognitive)factors of engagement which ranges from co-curricular activities to good teacher and classrooms to intelligence can all pull or push the child out of the classroom.(Fredricks et al., 2004) to the mining sites.

The inability of the youth to robotically respect and comply with the behavioral and academic expectations in the school (Janowitz, 1975; Modell & Elder Jr, 2002), neighborhood and school environment variables (e.g., neighborhood youth behavior, neighborhood safety, and school safety) and social support variables (e.g., teacher support, friend support, parent support, and neighbor support)(Garcia-Reid, Reidss, & Peterson, 2005), are all factors that can push or pull the student to the illegal mining sites.

Exposure to community and school violence has been reported to have an emotional, psychological effects on the children in school (Aisenberg & Mennen, 2000; Buka, Stichick, Birdthistle, & Earls, 2001).According to Addae-Mensah and Djangmah, (2000)the proximity of mining sites the home of school children especially the disadvantage house hoods may influence them to go and work there.(Addae-Mensah, 2000; Djangmah, 2000). Some studies including Ernes (2014) suggests that illegal miners appear to lure their young ones of school-going age (Sports) into the mining activities as a means of offering a helping hand. They train them so they can benefit from them when they are older. To aggravate the problem, it appears these students themselves are not certain whether they will attend school or not and finally end up in illegal mining activities

2.6.1 Effects of illegal mining on the education of the Youth

School drop-out

Many of the Youth and children decide to sacrifice their schooling when they must choose between their education and illegal mining activities. This happens after many absenteeism and eventual stoppage of the schooling for the illegal mining activities. According to (E. E. Owusu &

Dwomoh, 2012), some youth place priority on “galamsey” than education. School going-aged children sometimes abandon their classrooms to mining sites to work for money at the expense of their instructional hours. Even though some Children with the poor financial background are forced to work at the site during vacation holidays, some of them work at the sites during the school hours.

Lower standard of education

The youth and children who choose illegal mining at the expense of their educational careers generally have lower standards in terms of schooling. Evidence from the research shows that the Youth and children in communities where illegal mining activities are happening have lower academic performance in the BECE than communities where illegal mining had not taken grounds in 2015 and 2016 BECE which was conducted by the West African Examination Council (WAEC),

The illegal mining activity also affects the academic performance of students in those communities; the standard of education in these communities is not spared either.

Disrespect, indiscipline and other indecent acts

Most youth after engaging into illegal mining, then become disrespectful to the elderly, including their own parents and teachers since they have money. These acts of insubordination are sometimes shown under the influence of drugs like marijuana and alcohol (Ankutse, 2016). Drug addiction is also one of the negative consequences of the illegal mining activity as majority of the youth end up engaging in drugs and premarital sex which may lead to teenage pregnancies.

Besides these, there also the incidence of other social vices including prostitution and its associated STIs in the host communities (Ofei-Aboagye et al., 2004). Armed robbery, conflict, and lawlessness are common in all mining communities. On Monday, 29th May, 2019, the lynching of a Ghanaian Soldier, Capt. Maxwell Adam Mahama who was assigned to the Region to fight illegal mining menace by some angry mob at Denkyira Obuasi in the Ashanti Region of Ghana has been attributed to illegal Gold mining protest against the anti-Galamsey campaign. Many people including some youth have been arrested and are facing prosecution. All these can indirectly have detrimental effects on the youth's education.

2.6.2 Other effects of illegal mining

The creation of employment and earning of incomes for people including the vulnerable groups which like women, youth, children and other people involved bring improvement in their standard of living in those communities as they patronize the sector, and this cannot be overemphasized. It is however associated with some negative outcomes like a "trickle-down effects" in terms of the "Resource curse" and "Dutch disease" concepts where host mining communities becomes ill-developed despite its contribution to the economy.

On the environment, harms like the destruction of the vegetation and (loss of Biodiversity), The Atiwa forest is one of the endangered forest reserves out of more than 260 protected areas (Ofei-Aboagye et al., 2004), in the country due to illegal mining. There is also degradation of the farmland, and the destruction of food and cash crops. In April 9 2013, the Daily Graphic Newspaper reported that Cocoa farmers in Dankyira East are selling the farms to Gold mining companies which are subsequently leading to the shortage of food.

On health, fatal health implications like contracting of diseases like Upper Respiratory Tract Infections, silicosis (Ankutse, 2016) may also occur. Water pollution as a result of contamination of rivers by the Lead, Mercury, cyanides, and dumping of the ‘spill-over sand and exploration in the water bodies also leads to water-borne diseases like cholera, diarrhea and bilharzia. In extreme cases, there are instances that the activities have led to deaths. According to the International Labour Organization, mining is one of the world’s most hazardous occupations; it is associated with about 15000 deaths each year. In South Africa, each ton of Gold mined cost life and twelve serious injuries (Africa Agenda, 1997). Just like other parts of the world, Illegal mining has also caused the loss of several lives in Ghana.

2.7 Conceptual framework

The workdone by the youth in the informal sector as a result of their limited access to formalized jobs is an issue of great concern because their educational attainment, nature of the work and their poverty level becomes a merry go round scenario in which in the attempt to cover a hole, another hole is dug. This turns out to be a journey of no return in a life-long poverty in rotation and that is what this concept is about.

MacDonald in relation to this said that, the biographical narratives of schooling is a first step towards understanding broader and longer-term processes of social reproduction and how exclusionary changes occur, among young people in poor neighborhoods (MacDonald et al., 2001)The schooling and other lifestyle of these youth can holistically by understood(Coles,2000) through a wide view of changes in the economic situations and how young people carve out of school to work temporally as careers at the illegal mining sites or on the streets in relation to the structure of opportunities that prevail for them and end up remaining at that place for life(Roberts & DelVecchio, 2000)

In a related development, Mancini & Serenella, (2008); Sala, Vasta, Mancini, Dewulf, & Rosenbaum, (2015) have indicated that, the Social Life Cycle (SLCA) can be assessed operationally to see the social and sociological aspects of products, their real or prospective, positive or negative effects along any processes and products. The shortage of formalized jobs in cities turns to worsens the plight of the predominantly informal sector that employs more than 80% persons (GSS, 2008) in both urban centres and rural centres. Labour market mobility set in as many of the youth in the cities shift their attention to the informal work in the villages.

The employment, unemployment, and participation situation of the youth in the formal and informal sector occur in the same circular manner and this manifest itself extensively because there is massive shortage of attractive job opportunities (unemployment) and these few opportunities (employment) that is been pursued by the majority of unemployed youth. This causes a "labour market mobility and an expansionary aggregate demand" which will either worsen the labor market performance or improve the conditions of the youth. (K. Clark & Summers, 1981).

At the rural centers, there appear to be a shift in paradigm in terms of the work done by the youth; most youth who are not absorbed by the formal sector or interested in agriculture also channel their energy to other available work such as illegal mining (in the informal sector) that will make them earn money.

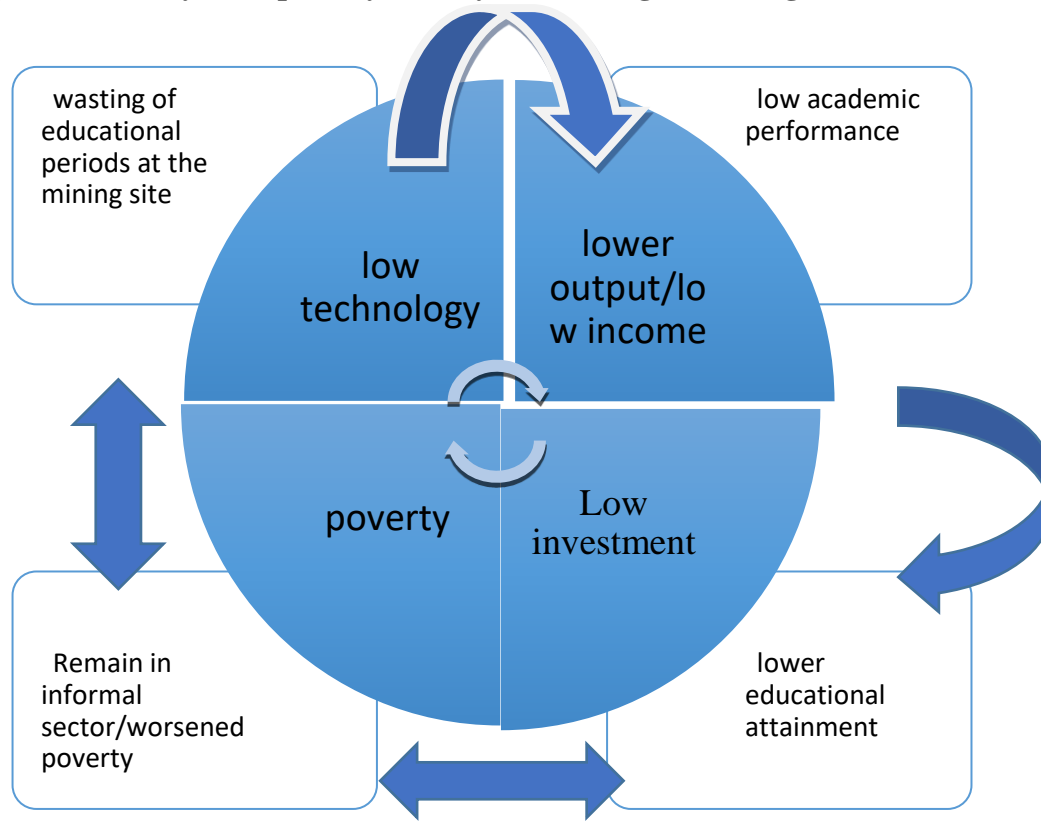
Building this concept on the 'Poverty trap cycle of artisanal mining by Hilson and Pardie (2006), such that, illegal miners who are youth, continue to be trapped in a cyclical poverty situation whereby operators like 'pit owners' and artisans turn to dwell in indebtedness and hardship due to the low technology in the methods used in processing and extracting the Gold (Sinding, 2005).

This result in lower produce and selling of this little produce yields a minimal return in terms of cash. This results in their inability to save or invest and therefore continue to live in cyclical poverty.

By adopting and modifying the concept with regards to the 'Effect of illegal mining on the Education of Youth', the youth resort to illegal mining as a place of seeking financial refuge, however, they become enslaved in the act of illegal mining. This is because they are unskilled and uses lower technology for the prospecting and extracting the mineral. They in turn, waste their educational periods at the illegal mining sites since they lose the lesson taught at the time of their absent and this results in bad or poor academic performance. These effects can also become the cause in a cycle. Thus, the claim that 'in a given area, the increase in the numbers of artisanal and small-scale miners, with inadequate human and social capital, on limited and marginal resources, lowers productivity and income per head' (UNECA, 2003, p. 2) is not entirely true

Poor academic performance of school-going youth who have wasted their instructional hours at illegal mining sites may make the youth immobile in the informal sector or send them back into this situation; their poverty situation will remain the same. With no high formal educational attainment, they may not get any formal sector employment. Here a reversible gloomy situation sets in where been in the informal sector will not make them attain higher education and not getting higher education will also make unable to join the formal sector hence remain in the informal sector. In the end, they then resort to or remain in the illegal mining activity thereby also becoming caught up in a life-long Poverty cycle, as shown below (Figure 2.1)

Figure 2.1 The cyclical poverty of the youth in illegal mining



Source: Author's conceptual framework (Adapted from the Poverty trap cycle concept of Artisanal mining by Hilson and Pardie(2006)

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methods used in carrying out the study. It covers the design and methodology, population, sampling techniques and sample size. The chapter also considers the usefulness of a chosen approach, and what it entails for the purpose of meeting the objectives. The chapter also presents sources of data, methods for data collection, data management and analysis as well as ethical considerations, and the limitations of the study.

3.1 Study Area and the site description

East Akim municipality located in the central part of the Eastern Region of Ghana and is made up of 8 zonal councils and 110 communities and towns. The municipality is currently under consideration to be divided into two that are (Akim-Abuakwa North and Akim-Abuakwa South) as one of the beneficiaries of the 2018 creation of the new districts in Ghana. Under this new development, all the mining areas under consideration will fall under the jurisdiction of Akim-Abuakwa South.

The municipality is bounded by six districts namely Atiwa District to the North, West Akim District to North West, Fanteakwa District to the East, New Juaben to the South East and Suhum – Kraboh-Coaltar District to the West. The District Capital is Kyebi. It has a total land size of approximately 725km² with a total population of 120,972: with 48.8% male and 51.2% females (GSS 2010). The municipality is also home to Atiwa Forest reserve which is the second finest virgin forests in Ghana.

The predominant economic activity among the populace is mining and farming. Mineral deposits in the East Akim municipality include gold, diamond, bauxite and kaolin. Large

scale Gold mining as well as small scale gold mining covers a total area of about 343 and 159 acres respectively. There about 10 large scale mining companies operating in the area, these include; the MOS Mining Company Ltd, at Kibi and Asikam, Managing God's Resource (MGR) situated at Adukrom. Kibi, Goldfields at Osino and Asiakwa and BSD Mining Services limited also at Asiakwa. The East Akim Municipality was selected for this study because it is a predominantly farming community which has been caught up in the web of mining activities over the last decade.

The take-over by the mining activities appears to be in competition with farming for the factors of production such as land, labour as well as capital. This creates a mixed-impression of improving or degrading the livelihood of its inhabitants, that is, there are others who believe that the mining has contributed positively in their life. Eggert (2001) stated that mining improves income and livelihood. Meanwhile, Akabzaa and Darimani (2001) indicated that the negative consequences of mining far outweigh any gains it brings about. Small scale mining in the East Akyem District had polluted the Ayensu, Densu and Birim rivers which served as sources of water for nearby communities (Institute of Statistical, Social and Economic Research (ISSER,2017:203)

The towns which were considered for the study include Kyebi-Akwadum, Asikam, Kyebi-Pano, Asiakwa and Adukrom in the East Akim municipality. The towns were chosen because the concessions of the mining companies in these towns have always been affected by illegal mining (galamsey). The Atiwa forest which has a total area of 26,271.75 hectares has had 2,649.57 hectares allegedly under siege due to encroachments by illegal miners and chainsaw operators (TV3 News.com, January 11, 2018). Apart from the mining of gold and diamond, other extractive activities in the Municipality include Sand Wining and Stone quarrying.

Mining communities are characterized by their poor road networks and undulating landscapes. The giant billboards of registered mining companies spread along each side of the roads leading to these communities are enough to give a cue to visitors. Upon entering the towns, it could be noticed that the main items being sold by most shops and vendors comprises wellington boots, robes, pickaxe, spade and shovel, pumping machines, water-hose, and others. These items give a clearer indication of the major activity taking place in the town.

The cleared vegetation, partly- heaped sand and washed gravel that is scattered along the road leading to the sites are enough to herald anybody entering into a mining site .The site clearly shows an already mined and abandoned site due to the huge gullies and partly reclaimed lands that are bare or covered intermittently by scattered shrubs. Some dilapidated wooden ‘made-shift’ structures serve as a shelter in extreme ends of the sites. These structures have other apartments where the Food vendors also ply their trade which also serves as the dining place for the miners. Used sachet water containers, empty cigarette boxes and alcohol containers scattered on the heaped mud sand or on the lakes of stagnant water are easily noticed at the illegal mining sites.

3.2 Research Paradigm and Philosophical foundations

The research paradigm the researcher adopted is interpretive research paradigm which Bhattacharjee (2012) describes as based on the supposition that “social reality is not singular or objective, but is rather shaped by human experiences and social contexts (ontology), and is therefore best studied within its socio-historic context by reconciling the subjective interpretations of its various participants”.

The researcher embraced the possibility of multiple and different realities in the conduct of this study. The accounts and experiences of participants were reported and where appropriate,

in their actual words to demonstrate their different experiences. According to Creswell (2013), the ontological issue relates to the nature of reality and different researchers embrace different realities. These were positions that guided the researcher as well as the various stages of the study.

3.3 Research Design and Methodology

According to Yin (2009) every type of empirical research has an embedded, if not clear, research design. The design is the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions. Its main purpose is to help to avoid the situation in which the evidence does not address the initial research questions. The research design for this case study focused on what Yin (2009) considers important components: a) the study's questions; b) its propositions; c) its' unit(s) of analysis; the logic linking the data to other propositions; and d) the criteria for interpreting the findings.

Other areas of consideration will be three (3) key processes namely: a) the data collection process, b) instrument development process; and c) the sampling process. In the designing of a research, researchers have the opinion of a making a choice between the three research approaches, namely quantitative, qualitative and mixed -method (Boateng, 2014)

The study on illegal mining and its effect on the education of the youth was qualitative research and the rationale for this choice is because it involves exploring issues, perceptions, opinions, and experiences of people regarding the key variables in the study such as illegal mining, education and youth.

According to Creswell (2013), a good qualitative case is that it presents an in-depth understanding of the case. This study therefore extensively interviewed key actors within the Communities in East Akim Municipality to obtain information that will contribute to

understanding the effect of illegal mining on education of youth. These approaches wield the purpose of examining the effects of illegal mining activities on the youths' education in the East Akim Municipality. Through these means, the researcher was able to locate some children aged between 15 and 24 working at certain sites in the selected mining communities within the said Municipality in the Eastern Region of Ghana who was chosen as the case in this study.

The case study approach was proposed because it allowed for different techniques that were suitable for eliciting various kinds of data from multiple sources to be deployed. The case study enabled the researcher to do a thorough assessment of phenomena in gaining insight into the processes through a qualitative research approach (Verschuren, 2003).

A case study, according to Yin (1993) is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when boundaries between phenomenon and context are not clearly evident. By giving rooms for exploring individuals, simple to complex situations as well as relationships or programs within the underlying notion of understanding the situation, the researcher was able to grasp the context of the issue under study and was able to be in the know of the 'why', 'what' and the 'how' about the illegal mining activities. Yin (2003) insisted that, a case study is suitable for examining 'why' as well as 'how' and 'what' questions (in the midst of; who, what, ,how and why questions of a study),whilst enabling close collaboration between the researcher and the participants as the latter tells their stories (Crabtree & Miller, 1999) with flexibility and adaptability to the objectives (Hodkinson & Hodkinson, 2001).

The researcher's experience in small scale mining activity and his ability to communicate with the participants in the local language as well as in English was an added advantage to the study, some terminologies such as *okada*, *kolikoli*,*soagum*,*karat*, *tribute* and *chanfai*

machine were well understood. Again, the nature of the galamsey activity and work being done by the youth at both the mining and illegal mining sites were unearthed as the researcher engaged the participants in the study.

3.4 Population

The study was carried out in East Akim Municipality of Ghana and the target population consisted mainly of youth in the East Akim Municipality. For gender balance, both sexes (male and female) were targeted as respondents. There were also key informants who were able to provide vital information on the subject matter.

3.5 Data Sources and collection

A combination of primary and secondary data was used in this study. Documentary reviews and analysis was undertaken before and during the study. Relevant secondary data included scholarly articles on the topic, research reports of independent organizations including the World Bank and the International Monetary Fund, and newspaper articles.

Primary data was collected through face-to-face in-depth interviews using interview guides, focus group discussions guides and observations as detailed below.

Multiple methods were considered for data collection to ensure that the combined information from both primary and secondary sources yield a comprehensive repertoire of data that will be used to support findings, conclusions and explanations of the study. Methods used for data collection ranged from desk reviews, individual interviews, focused group discussion (FGDs) to observation. These combined approaches have a high potential of making the study outcomes dependable and reliable. The Ghana education Service annual report about education in the Municipality was used. Information in the municipality was also used. There was also archival data desk review of material which included scholarly articles on the topic, research reports of independent organizations including, World Bank and the

International monetary fund, school and institutional reports, academic journals and newspaper articles. A write-up of the desk research was produced and used as a framework and guide for the fieldwork.

3.6 Sampling Techniques

Due to the sensitivity of study, Purposive sampling technique was used to select the youth groups of boys and girls, the staff of the East Akim Municipal Education directorate, the head teacher and the Mining Companies.

According to Bryman (2008), purposive sampling aims at making sure that all prospective informants have an appreciable level of knowledge of the subject matter of the research based on their expertise or experience. Additionally, snowball sampling was used to ‘fish-out’ the youth leaders, people who fitted the inclusion criteria to participate in both the FGDs and the individual interviews.

The simple random sampling technique was used to select some respondents for another interview on the aftermath of illegal mining in the town. Due to the heterogeneous characteristics amongst respondents; a simple random sampling technique was used to sample community members for these interviews. This was necessary to help ensure accurate and proportionate representation as well as effective generalization of their responses for the populations in the towns respectively. Purposefully and randomly, the enrolment, dropout and completion percentages, as well as the performance of some schools at certain years were also selected and used. These participants were selected based on their knowledge of the research questions, age, gender and willingness to be part of the research. In all fifty-two people comprising forty-five youth and seven adults were engaged in the process.

3.7 Preparatory stage

The researcher began the fieldwork with a reconnaissance survey of the mining towns in the Municipality. These comprised Asiakwa, Segyimase, Asikam, Adukrom, Pano, Kyebi, Apapam, Ahwenease, and Kibi-Akwadum. During this trip, a pre-testing (of the interview questions) was done to check the appropriateness of the questions and choice for the Towns of the selected towns, who had earlier under study. The opinion leaders (Assembly members) been hinted on issue, were contacted who introduced the researcher to youth leaders after short briefings on the objective and purpose of the research as stated already.

Upon interacting with the Youth leaders, I realized the illegal mining activity has been brought to a halt in some of the communities therefore the best places for the study will be Kibi-Akwadum, Asikam, Akwadum, Kyebi-Pano and Asiakwa. As a matter of coincidence, the youth leaders are also beneficiaries of the activities of illegal mining and therefore a point of contact for other youth. The other places were strictly safe guarded by the ‘Operation Vanguard security’ and are therefore tagged as no-go areas for illegal mining. In this regard, any study over there may be to ascertain and compare the impact of illegal mining in their life and on their education when it was at its peak and this time that it has ceased, in those Town.

3.8 Data Collection

The researcher conducted two focus group discussions consisting of 10 boys and 9 boys for the first and second respectively in an illegal mining community .In another illegal mining town, with 2 units of boys focus group interviews consisting of 7 members each in one illegal mining community whiles one different focus groups made up of seven girls also took place in that same community. Four focus group discussions were held with different young people

between the ages of 15-24 years to explore their views on the issue of illegal mining and how it affects their education. Focus Group Discussions were appropriate for the study because it enabled the researcher to obtain diverse responses from multiple respondents in fewer interview sessions. Also, just like interviews, the researcher was able to probe for further responses and obtained in-depth opinions from participants.

In addition some individual interviews were held whilst another 9-member heterogeneous interview was held in a Community in which illegal mining operation has ceased to seek their views on the subject when the activities were at its peak and this time that it is no more.

The interview was centered on the effects of illegal mining on their life with a critical consideration on the education of the youth in the Town. The foreman of the ‘managing God’s resource’ mining companies, the public relation officer of Municipality’s education office were also interviewed as well as a head-teacher of a basic school in one of the mining communities. The rate of enrolment for a particular batch of student was considered as well as the dropout rate of selected public and private schools in certain years in the advent of mining within the study area. The performance of student of three schools in a CASM in the BECE was co- hosted with that of three other schools which were randomly selected from a non CASM in some relevant years. These samples were justifiable because the effects of illegal mining on education of the youth is considered a complex and sensitive issue and requires diverse perspectives to facilitate deeper understanding of the issue and application of steps to address it.

3.10 Data Management and Analysis

The data used were written or recorded using audiotapes, recorders and phones camera. After which all findings were analyzed and compared for trends, consistency and confirmation of facts or evidences. Thematic analysis was undertaken following the data coding at different

levels using field notes. The data were transcribed following the coding format: Simple quotes and embedded quotes in the researcher's analysis were used where appropriate. Much longer quotes were used where necessary in order to communicate more complex situations or understandings. All of these were in line with what Creswell (2013) refers to as bringing in the voice of participants.

3.11 Ethical consideration

A formal approval was obtained from the CSPS, University of Ghana-Legon. During data collection stage, the researcher sought informed consent (consent form in Appendix A) from respondents and assured them of confidentiality. The overall purpose and objectives of the study were explained to participants and the researcher requested their voluntary participation. The process and approach of the interview and the Focus Group Discussion were also explained, and each respondent was informed that he/she is free at any point in time to opt out of the process if he/she so desires.

3.12 Limitations of the Study

Illegal mining was a very sensitive issue at the time of conducting this research. Recruiting people to participate in the study was a challenge as people felt insecure to talk to, open up or talk about their illegal mining status

Both ASM and Illegal mining, literally called 'Galamsey' are abomination in recent times in all parts of Ghana following the ban on the activities by the Government. As a result, many of the respondents declined to take part in the process for fear of been trapped. Some respondents willingly opted out though they had earlier decided to be part of the interview process. One respondent said in the local language, 'I suspect you to be someone working for Anas (an investigative journalist in Ghana), and not a researcher as you said', thinking that I have come to enquire whether they are still doing the 'thing' in spite of all this enforcement.

After several interactions and negotiations, they decided to take part on condition that, the name of the Town be withheld even though I had earlier promised them about their anonymity. The head teacher could not provide the attendance records of the schools under study within the mining communities because basic schools were on vacation at the time of the visit.

The introductory letter from the Centre for Social Policy Studies served to lessen this lackadaisical attitude on the part of some Government officials.

3.13 Summary

This chapter has presented and discussed the various methodological choices, methods, and techniques used to collect data for this study. It looked at how preparations were carried out to facilitate the fieldwork, how the fieldwork itself was approached, and how the data acquired on the field was managed and analyzed in an attempt to answer the objectives of this study. The chapter also considered and discussed sampling processes, various sources of data collected, and the challenges encountered in the process.

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.0 Introduction

Chapter four presents the analysis and discussion of the data collected. It presents data collected from the youth in illegal mining, an officer of the Ghana Education Service (GES) in the municipality, a head teacher, the foreman of a mining company in the community and a few inhabitants of another community where illegal mining has ceased. The chapter also presents the socio-demographic characteristics of the respondents. The main and specific objectives of the study are discussed according to the themes that emerged from the thematic analysis of the data gathered.

4.1 Socio-Demographic characteristics of respondents

Since illegal miners are not homogenous in nature, perhaps as a result of the kind of work being done at the sites, different people (both and old) from different walks of life are engaged in it. This factor is in turn influenced by their socio-economic background in one way or the other.

Table 4.1 Socio-demographic background of respondents

	Youth	Adults	Total	Percentages
Sex				
Male	39	3	42	81
Female	6	4	10	19
Total	45	7	52	100
Religion				
Muslims	6	0	6	12
Christians	39	7	46	88
Indigenous status				
Indigenes	40	4	44	85
Non-indigenes	5	3	8	15

Source: Field survey, 2019

A total of 52 respondents were therefore engaged in the study. Out of these numbers, 45 were young boys and girls (youth) while the remaining 7 were adults who are related or have in-depth knowledge as far as the education of the youth and illegal mining is concerned.

4.1.1 Adult respondents

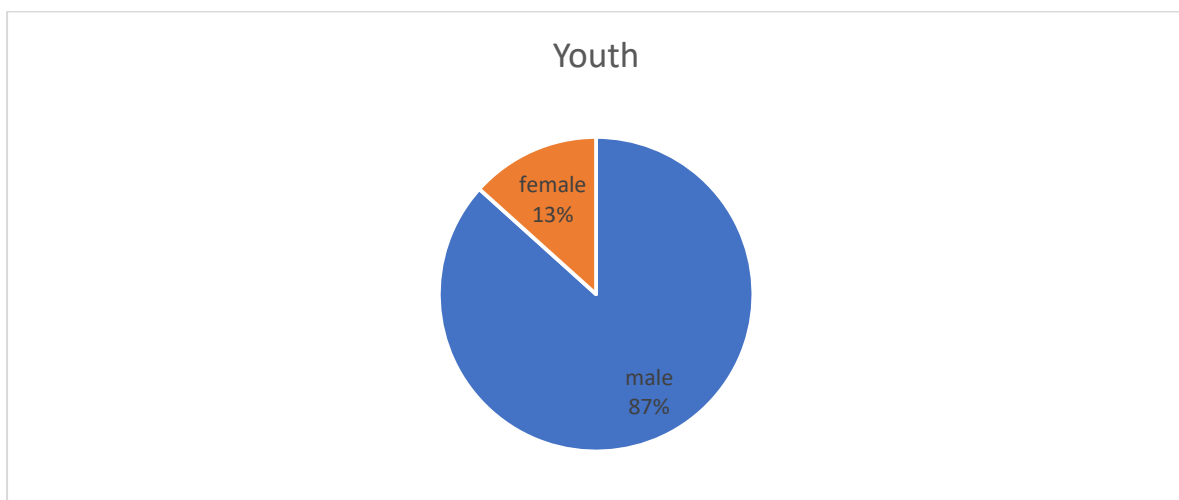
The seven adults respondents included 3 male key informants and four females consisting of the head -teacher of one basic school in a mining community (CASM), one person from a mining company and the other from Ghana Education Service directorate, all in East Akim.

In addition to that, there was one other woman that had child who is into illegal mining, other adult that also has a brother who is also into the act of mining, beside that number, there was a lady who doubles as the wife of an illegal miner and a trader who used to sell drinks at the site as well as a former (veteran) illegal miner.

4.1.2 Youth respondents

The illegal mining provides an alternative, non-farm employment for the youth particularly, those who by virtue of their limited education have limited options in the formal sector. Statistics indicates that the percentage of the youth involvement in illegal mining within mining communities is quite problematic, partly due to the low entry barriers and the rapid growth rate of the population (*The state of The Ghanaian Economy In 2016, 2017*). Because the focus of the study is on the youth, the data collection was mostly centered on the responses given by the youth with a size of 45 respondents whilst that of the adult was used as guided point of reference.

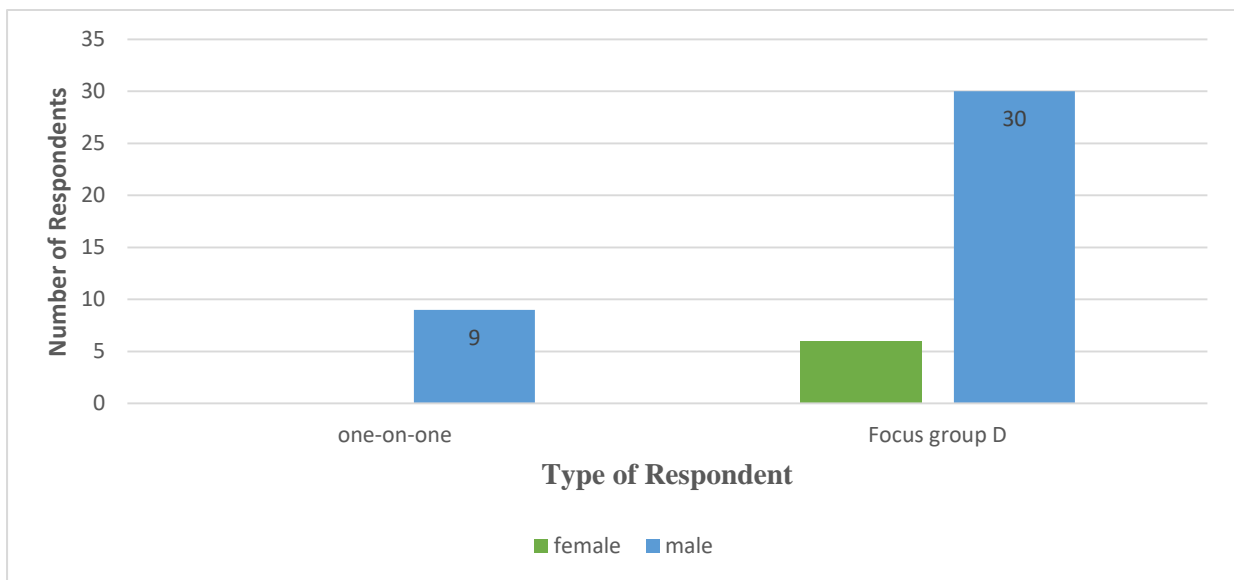
Figure 4. 1 Gender percentages of Youth respondents



Source: Author's Field data

Within the youth sampling size of 45, 6 (13%) were female and 39(87%) were male respondents. This indicates that the boys are more into illegal mining activity than girls. It also reflected in the number of males and females who took part in the interviews. There were more male respondents engaged in illegal mining activities which are supported by existing statistics and data on the subject. Figure 4.2 indicates that 83% of respondents that engage in the focus group discussions are males and 17% are females.

Figure 4.2 Type of Respondents by gender



Source: Author's field data

Table 4.2 shows the age categories of the youth that were interviewed during the study. Among the 45 youth, 29 respondents were within the age ranges of 15-19 years. Also 16 of the youth were between the ages of 20 and 24. The data shows that, among the youth aged between 15 and 19 years, only a few of them were below 18 years working at the sites.

Table 4.2 Age Category of Youth respondents

Age range	Sex of respondents		Total	Percentage
	Female	Male		
15-19	2	27	29	64
20-24	4	12	16	36
Total	6	39	45	100

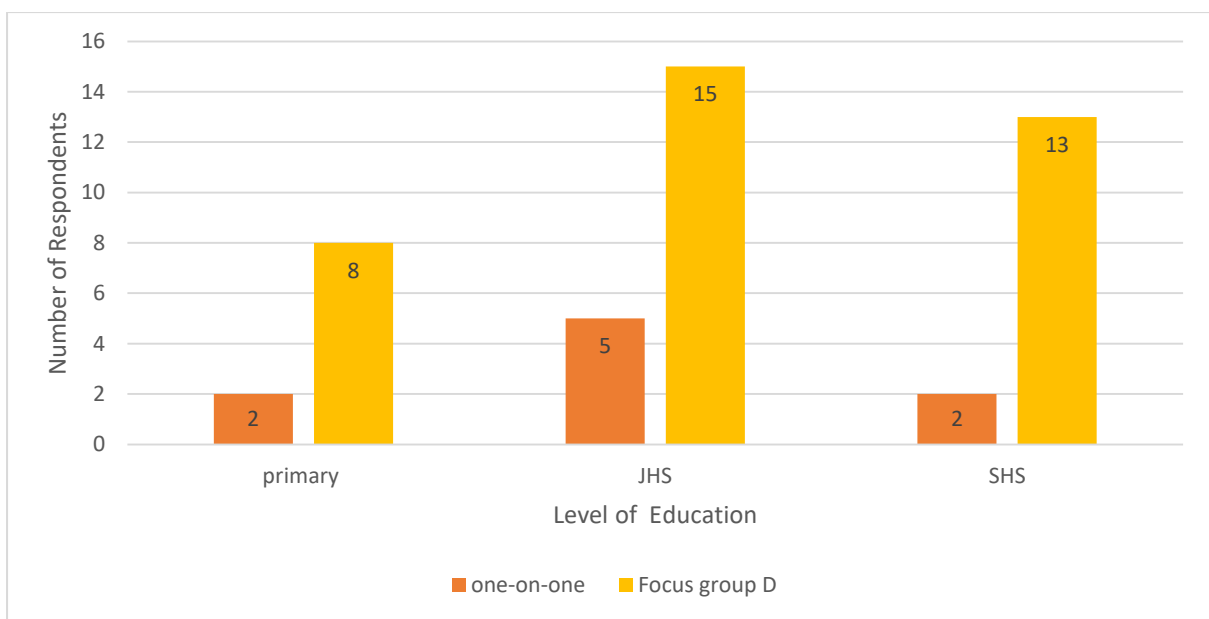
Source: Author's field data

Figure 4.3 also shows the level of education attained by respondents at the time of starting the illegal mining business. According to Liwanga (2013), the youth and children are at a greater risk than adults considering their smaller size and weaker strength, a situation that is firmly reported by the labor conditions in the artisanal mines is also extremely hazardous and that may account for the small number of youths under 18 in mining. Most of the youth interviewed ventured into illegal mining at the Junior High School (JHS) level, 20 respondents out of the total youth interviewed said they started when they were in JHS and this is followed by 15, for those at the Senior High School (SHS) level with Primary section been the last grade with 10 respondents. The implication here is that, per the nature of the work, primary school pupils are hardly engaged into it. This could account for the small number of Primary pupils without been prejudicial to the ILO convention (No.182) and UNICEF standards that advocate for non- engagement of persons below the age of 17 in hazardous work.

According to figure 4.3, limited numbers of the SHS pupils are into illegal mining, indicating that at secondary School level, the children being more in-tuned with their studies are less

likely to be lured into the illegal mining sites. It can be seen from figure 4.5 that 44% of the respondents started engaging in illegal mining activities at the JHS level. This shows that JHS students are more prone to dropping out of school due to illegal mining. Another level that pupils are more likely to drop out of school and engage in illegal activities is the SHS. 34% of the respondents started mining at the SHS level.

Figure 4.3 Level of education to start the illegal mining



Source: Author's field data

Table 4.3 highlights the number of years that the respondents have been involved in illegal mining activities. The study revealed that almost 18 of the respondents had been in the illegal mining business for more than six years. This number accounted for 40% of the respondents interviewed. This is followed by 10 respondents (22%) who started in the last five years. Within the last two years very few youths have entered the illegal mining activity. Two percent of the respondents reported to have started mining activities within the past one year.

Table 4.3 Years of youth involvement in illegal mining

Years of involvement	One-on-one	Focus Group	Total	Percentage
Up to 1	0	1	1	2
2	1	2	3	7
3	1	5	6	13
4	2	5	7	16
5	2	8	10	22
6 and above	3	15	18	40
TOTAL	9	36	45	100

Source: Author's field data

4.2 Work done by youth involved in illegal mining activities

The youth are involved in all sort of work at the various mining sites. According to Hilson (2010), below 16 years children are forced to dig and carry sand, wash and pound gold-bearing gravels, sell or spy at the illegal mining sites in the Northern Region.

The Modus operandi of galamsey consists of many activities. After the mineralized land is identified through reconnaissance and privileged information sourced from the geographical survey team of the large-scale mining companies. (ISSER, 2017:191). Informal mining activities typically take place around the mining concessions of the large-scale companies and on the abandoned lands of these large-scale mining companies. Gold-dealers become landowners and subsequently 'Pit-owners' who may gain access to these lands through

(tributary) outsourcing from a registered large or small-scale mining entity. This happens after registering their interest in a particular land by calling on the local government structures and the traditional authorities. The owners then engage anybody including women and youth to work in groups on the said land as diggers, haulers, blast-men and carriers. There are however free-lance “galamseyers” who move from one site to another with their tools in search of any loose land within and around ‘approved’ land to operate on.

The research reveals that the youth are engaged in a variety of work at the mining sites. There are gender differences in the work that goes on at mining sites. The younger men do the more laborious tasks such as digging and pulling (of sand); women and children are assigned to less difficult job like carrying and washing at different mining sites. Even within the sexes, there are specific activity that are carried out by older men and others by younger men. Gavin, 2010, quoted Chakravorty, 2001; Gunson and Jian, 2001 and Hilton et al., 2004 that, Women are not allowed to enter into the deep pits, they are rather tasked to work on the surface which is mostly referred to as ‘top face’ due to some “diabolic” traditional beliefs relating to menstruation and womanhood.

Generally, the youth are involved in digging of sand from the pit, river and banks using short mattocks and truncated pickaxe. These dug-out loads of mud, sand or gravels are then scooped using short shovels and put into head-pans or metal buckets and are carried to the processing plant (*chanfai*) machine by other youth and women, where it is cracked, sieved and washed. Underground loads are pulled up in sacks and in metal buckets that are either tied or attached to robes by some able men on top of the pit.

Another common activity at the site is the washing and sieving. The filtering of gold-containing sand (*Ayaa*) from the gravels using a perforated metal sieve termed also knows as ‘top’. Sometimes the *chanfai* machine is used for breaking the bigger gravel, or manually

some stronger youth do the breaking with their physical strength and sieve it afterward. The sieved material is then mixed with a large quantity of water which will wash the sand away from the heavy goldmetal after which bigger nuggets which they term 'black' are removed. Older boys or girls then use a black flexible rubber plate to twirl the remains, while spinning and adding more water to clear the 'debris' leaving the heavy gold, this is called panning. The rich clay(*laka*) might require more water for sieving. This is the final stage where the gold is extracted; therefore, the pit-owner or a trusted fellow is tasked to see to that. After, a substance they termed '*med*' which is the local term for mercury is then applied to amalgamate the chalky left-over together. Other work done are the running of various errands for the older workers such as going to town to buy food and water, cooking and selling as well as acting watchdogs etc. The youth are involved in all sort of work at the various mining sites. According to Kala (2015), about 50% of youth at the mining sites are involved in the provision of other services ranging from the selling of alcohol to the provision of sexual services in exchange for money, 25 % are digging the ,18% are doing the processing of the ore while the remaining 7% are dealers.

Similarly, the field data showed that, twenty-one of the youth were doing services such as riding *okada*(motorbike), serving as 'watch-dogs' and selling among other things. Ten of them said they do the digging whist other eight stationed near the gridding machine were involved in the processing of the ore. Two persons said they collate the booty to a merchants (dealers) who resides in the City. Some section of the youth felt shy to describe the sort of work they do at the sites.

4.3. Causes of illegal mining

Both primary and secondary data revealed that, people including the youth mostly venture into illegal mining business for several reasons.

This section looks at the factors that propel people especially the youth to engage in illegal mining activities despite the huge risk involved. The factors driving the youth into illegal mining are mostly economic and social constraints including poverty, loss of trading capital, poor harvest, death of breadwinner of the family and others.

4.3.1 Poverty

Economic hardships have always been a factor that leads most youth into the illegal mining business. Hilson and Banchirigah (2009) tilts in favor of this claimed that small-scale mining (formal or informal) is poverty driven.

The researcher's experience at the site and responses given by the youth indicated that one of the primary reasons for which the youth entered into illegal mining activities is economic hardship faced by the youth and their families. One of the respondents, Dan (not actual name) that were interviewed said:

Home is not good, there is poverty in the house; my parents are poor that made me join the "galamsey". We do it because of the economic hardship; there is no money in this community so the only means of survival is the "galamsey".

Kola also had this to say, if you are young boy and you don't go into kolikoli(galamsey) you will die out of hunger. Nobody has money to give to you in the family, so you need to force. Source: Author's field data

According to Thorsen (2012), rural families diversify their revenues by taking up mining. If the farmlands of local farmers are seized by mining companies with little or no

compensation, many experiences increased poverty due to a lack of alternatives (ibid). Similarly, most of the people interviewed cited poverty as one major reasons for which the youth in their communities entered into illegal mining.

4.3.2 Unemployment

Unemployment has always been one of the key reasons for which many young boys and girls venture into formal and informal mining. ASM create employment opportunities for growing populations of youths who have limited alternatives in developing countries, even though some of these youth are minors (Thorsen, 2012).

“Paradoxical to the ‘problem’ of youth labour is the ‘problem’ of youth unemployment, which in Ghana stands at 25.9% among the age range of 15–24, more than twice the rate among 25–44,(10.6%) and four times that of 45–64(6%)(GSS Labour Force Report,2015).

Another reason for youth engagement in illegal mining is the lack of employment opportunities in the community. Youth unemployment is of greater national concern and it is even direr in rural and poor communities. The youth in the study communities pointed to the lack of jobs and employment opportunities as one of their reasons for going into illegal mining. According to this respondents, Asuo, *there were no jobs in their community it, is either you do farming or galamsey. The farm lands have even been sold out by our clan-heads.* Another male respondent at Community AS said: *we can’t go to the city and sell dog chains on the street; this is what we can also do to make ends meet.* **Source: Author’s field data**

“The Government has not brought any jobs which we the youth can do so we will have to resort to galamsey”. said by Manu at AS

Another respondent in another CASM also said that:

“as it stands, there is no money and there are no employment opportunities for us, we are suffering”

. According to these respondents there were no jobs in their communities. A male respondent (Koo) at CASM “AS” said:

“The Government has not brought any jobs which we the youth can do and we can’t go and steal so we will have to resort to galamsey” ...Koo

Another male respondent (Tofi) in another CASM (KA) also said that,

“as it stands, there is no money and there are no employment opportunities for us, we are suffering’ ’yes we wish to complete the school before working but we need certain things like books, which we will use the money to buy...Tofi

4.3.3 Lack of social support and irresponsibility

Support from family, institutions, civil societies organizations or even the government can go a long way to help the inhabitants of CASM.

Again Thorsen (2012) clarifying the factors that push or pull schooling children into mines says that, Rural ASM communities experience a lack of provision of public education and health facilities; a situation that also cited by Hentschel et al., (2002). Most youth may enter illegal mining work for lack of alternative options, including the opportunity to pursue primary and secondary schooling. The IHRC (2009) report combines the two reasons by saying that children drift into mining sites for lack of affordable and accessible basic education, coupled with the abject poverty faced by families in mining communities, allow parents to push the youth to work to supplement low household incomes.

The researcher encountered that, most youth in the CASM venture into the business of illegal mining due to the lack of financial support from parents towards their education, leaders, the

society and institutions. When the youth do not get basic support from their parents, family, the society and institutions, they may also resort to illegal mining in order to survive. Some respondents, 1) Mensah, 2) Koo and 3) Kofi from Kibi-akwadum (KA) revealed that lack of support was their main reason for going into illegal mining. This is what they have to say;

Also, there is no money in the house so going to school, what you will use to buy books and uniform? It has become hard, so we have to go into the “galamsey”. Our parents don’t help us so we also do the “galamsey” to pay our fees. ‘There is no help from any family member that why I got myself in this “galamsey” thing. **Source: Author’s field data**

4.3.4 Undue Influence by Friends and Families

Though some youth are influenced by certain circumstance to go into the mining sites this may include pressure from friends, sometimes influence from family members may push the youth into the mining sites to get money for them. In the case of the youth that were studied, they were mostly influenced by friends and peers as was captured in the words of one of participants at CASM

“As for me I followed a friend one day to the site and I have remained here since that time” a male respondent at AK

My mother asked me to go and sell drink at the site but when I went there, I got interested, because the other people were getting more money than me so I stopped selling and started doing kolikoli.-Akwasii, a male respondent at AS. In addition to this, Zinab recalled that.

*My boyfriend was into the illegal mining and I was selling drinks at the site, he told me to stop selling so we can all do the galamsey...*Zinab at AK, **Source: Author’s field data**

4.5.0 Effects of illegal mining on Education

Some of the youth respondents mentioned that they were able to finance the cost of their education through the proceeds obtained from the illegal mining activities. One of them said,

“yeh that’s all that my brother has said, we do the “galamsey” to buy food at school, school uniform and sandals” that is what Ataa at AS said.

In another development, Kwaata at AM said ‘Me I don’t go church, so I come here on Saturdays and Sundays and I used the money to take care of myself during the week’.

Source: Author’s field data

4.5.1 Decrease in academic performance

The advent of illegal mining activities has always been very detrimental to the education of the youth as it leads to high drop-out rate, low enrolment and attendance as well as poor performance of the youth. A respondent at Asikam (AM) said,

It has seriously affected education in this area, I myself when I was schooling, I was very brilliant but when I started going to the galamsey at the same time schooling, I realized my performance was coming down so it has not helped us in any way

If close look at the schools in all the mining communities can indicate a vast difference in the performance of the students in various schools in the Basic School Certificate Examination (BECE). The PRO of the Municipal education service had this to say,

Yes, that bad performance cannot be for only mining communities, but why is it that at first before the mining started the schools there could have done better.

If you see their BECE performance, you will know that what I am saying is true.

The BECE performance of the student showed that while the schools in the communities where no mining business is taking place were getting overall score of 100%, those in the mining communities were struggling with 69%, 54% or even sometimes 46%.in the 2015 and 2016 BECE.

A school like Kibi-Akwadum R/C look at their performance, out of the 12 students who sat the BECE, only 5 girls had between aggregate 31 to 35, all the remaining 7 boys had above aggregate 37 Source: Author's field data

At kyebi-akwadum, Kofi, a JHS graduate added that, *my performance in the BECE was not good, that is why I am still here. when I was in school, I wasn't regular at school, because most of the time I was at the galamsey cites.*

Koo from CASM AS said, *I believe that is the reason why many of our seniors who wrote the BECE performed poorly and as a result, they did not get any senior high school to admit them*

It could be inferred from the above that illegal mining is contributing to the poor performance of school children who are into the activity and this is reflected in the general performance of schools located in the (CASM) communities where illegal mining is taking place. Another negative impact of illegal mining activity has is that, as a result of the tedious nature of the work, the students come to the school feeling very tired and exhausted to the extent that they sleep in class or not able to concentrate fully on the lesson being taught. Some student leaves the school before the closing time and misses the subsequent lessons. All these would lead to poor academic performance, Heady (2003). The PRO of the Municipal education office in East Akim has this to say on illegal mining;

the illegal mining has affected those communities in terms of drop-out rate, school attendance, and performance. For drop-out, it is higher than those schools in a place where there is no mining taking place. On school attendance, because the children don't go to school regularly in communities where mining activities are on-going, their school attendance is quite low as compare to others.

As for performance, the school in places where mining is taking place as compare to schools in communities where no mining is underway is lower. You let compare for instance if you take a school in Tafo and a school in Kyebi, you yourself you will see that the Tafo schools are doing well in terms of performance than those in areas where they are doing illegal mining. Source: Author's field data

Table 4. 4 Effects of illegal mining on performance according to respondents

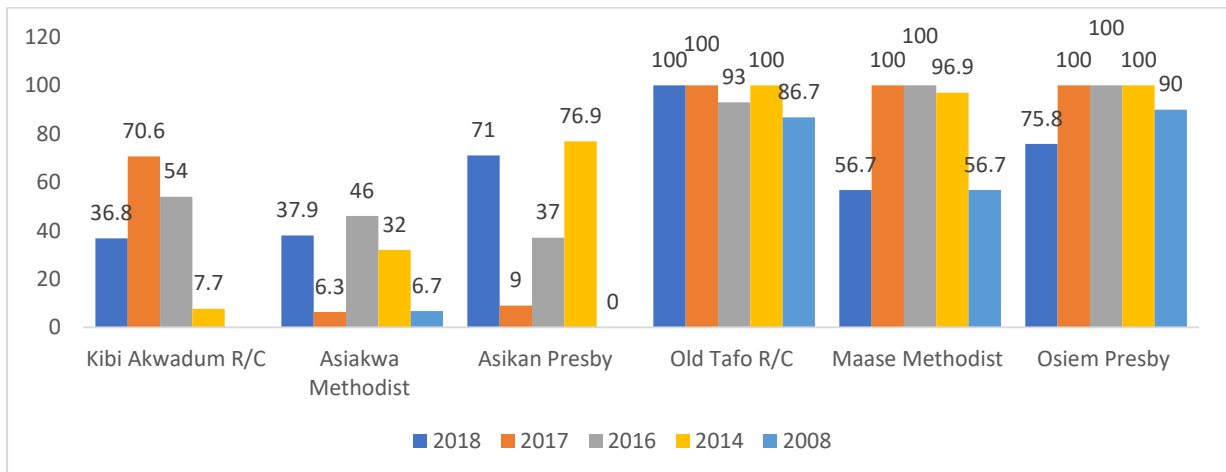
Effects	Number of respondents	Percentage
Increased	13	29
Decreased	18	40
Neutral	14	31
Total	45	100

Source: Field survey, 2019

Table 4.4 shows respondents' views on the effects of mining on children's performance in school. Almost half of the respondent, 18 (40%) said that their performance had decreased due to the fierce competition which exists between children's work, school

attendance and proficiency thus the work of children had an inverse relationship with performance or proficiency but 14(31%) of the respondents stood on a neutral ground that children’s involvement in mining activities have or have not affected the academic performance and 29% representing 13 respondents said that performance had enhanced partly due to the fact that children are able to buy some basic necessities both in the house including registering to write the BECE and to stay soundly in school. Comparing these responses to actual BECE performance of selected schools in CASM against that selected non-mining community, there was not much deviation.

Figure 4.4 Performance in BECE by Mining community (CASM) schools and non-mining community schools



Source: East Akim Municipal Education Office (2019)

A glance through the performance of schools in mining community during the BECE over the years it gives an immediate mixed impression about the BECE performance of schools in communities where mining and its associated illegal mining is not taking place and those schools in CASM.

It should be acknowledged that good academic performance can be attributed to factors such as, availability of professional teachers with better remunerations, provision of pedagogical consumables such as teaching and learning materials by policy makers and policy users, availability of logistics and infrastructures, good educational policies. Other student factors like attendance, participation in classroom assessment provisions also come into play.

However, an enquiry at the municipal and planning department revealed that all educational resources are equitably distributed to all schools in the area even though there are times that they consider where they are mostly needed. On this note, the state of the of three schools in the study were examined and it was shown that all the schools chosen, those in CASM (Kibi-akwadum R/C JHS, Asikam Presby JHS and Asiakwa Methodist JHS) and those in the non-CASM areas have good classroom blocks, they all benefit from the capitation grants, FCUBE, equal number of teachers, and the supply of school desk, textbooks and other teaching and learning materials are but none of them had a library. This made the playing field equally leveled for all the schools involved.

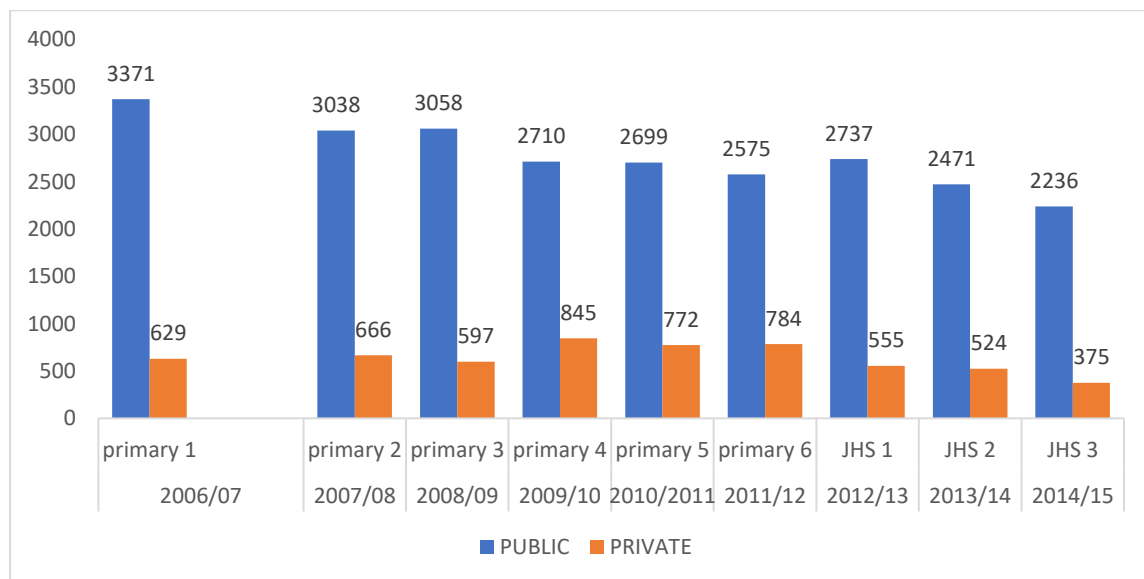
4.5.2 Effect of illegal mining on enrolment

Out of the 45 respondent whose views were sought regarding the effects of informal mining activities on school enrolment, went-nine percent of the youth respondents were of the view that enrolment has rather increased due to the notion that the formal mining company does not employ the indigenious people because they are not educated so parents are compelled to guarantee that their wards are always in school so as to get better employment opportunities in the near future. About forty-five percent said that enrolment has decreased drastically in the face of the vigorous mining activities both large and small-scale mining activities especially the galamsey whilst, twenty-two percent said that mining activity in the area does

not have any significant effect on school enrolment since many of the children who go mine site do so after school, on weekends, during vacations and on holidays, five percent gave no responses. It is therefore evident that illegal mining activities in the study area have caused some decreased in the enrolment rate in schooling within the study area.

After these responses, the researcher interviewed the PRO of the District education directorate who furnished him with the absolute enrolment figures of the study area. In order to assert to the veracity of the figures involve, the enrolment of the 2015/2016 batch of the BECE candidates was traced within their nine years periods of basic education, from Primary 1 to JHS 3.

Figure 4.5 Primary one to JHS three enrolment of 2015 batch of public and private schools in East Akim Municipal



Source: GES, East Akim, 2015

The figure shows that primary school enrolment in the study area decreased steadily from, 3371 in 2006/2007 academic year to 3038 in 2008/2009 academic year. From 2009 when the

mining started in the area, it dropped drastically to 2575 when they were in class six but shot up to 2737 as they entered JHS. In 2012/2013 the issue of galamsey was at its peak in the area, these years group was in JHS, from the JHS (1-3) which also showed a similar decreasing trend from 2737 in 2012/2013 to 2,236 in 2014/2015 as shown in the chart above. These figures showed a relative decrease in enrolment in both primary schools and JHS over the period from 2006/2007 to 2014/2015 (appendix). This is not encouraging taking into consideration educational policies like the Free Compulsory Universal Basic Education (fCUBE), the capitation Grant, School Feeding Program (SFP), Free School Uniform Policy (FSUP) and other educational programs running in the district.

The case is not different in the Private schools, a drop from 629 to 599 between 2006 and 2009 (P1 to P3), However, the story changed in the following year by increasing to 845 where it again retrogressed to 375 in JHS 3. With the whole and in almost all the classes or year groups, enrolment of boys was a way above the enrolment of girls. The figures somewhat agree with the responses from the field work that, the vigorous mining activities going on in the study area has had some negative effects on enrolment of students, especially those in the public schools.

4.5.3 Effects of informal mining on school drop-out

Table 4.5 shows views of respondents on the effects of mining on dropout in schools in the study area.

Table 4.5 Mining and school drop out

Effect	Number of respondents	Percentage
Increased	18	40
Decreased	17	38
No significant effect (Neutral)	10	22
Total	45	100

Source: Field survey, 2019

Out of 45 respondents, 18(40%) said that absenteeism and drop-out among school children had increased especially in the catchment communities where active illegal mining activities are taking place. This percentage of low school retention is created due to the fact that the rigorous illegal work done by school children interfered with education, in that, school attendance is foregone in favour of mining work such as galamsey. The presence of school-going-aged children at various galamsey sites gives an indication that indeed some of the children are draining their instructional hours at the sites. Learning is inefficient, either because the children are not allowed to spend time doing their homework or because they are unable to pay proper attention in school due to fatigue.

Gibbons et al (2003) and Heady (2003) agreed to this situation as the cause of the higher probability of repetition and dropout in schools. Ten (22%) respondents said that mining did not have any significant effect on dropout, but seventeen(38%) said dropout has decreased in the face of active mining activities due to the intrinsic motivation parents have obtained from the young educated workers employed in the formal mining company.

However, a veteran illegal miner added to the answered questionnaire that *“I think school drop-out has actually reduced.(school attendance on the other hand has rather increased,*

When the youth students starts getting money the first time, they become so happy and as a result, continue coming, they absent themselves and eventually stops the school. They were visiting the sites during weekends only to drop out into full time illegal mining when they vacate. We tell them to go but next you will see them again or they go to another site” ---a former miner. Source: Author’s field data

At Kibi-Akwadum, a male basic school respondent, one student had this to say on the effects of mining on dropout , *I should have been in JHS 3 by now with my other classmates but because of “galamsey” I am still in form two, I missed class for about six weeks ’---* Obour(not actual name)

Another male response was that, *as for me I still go to school, the only thing is that sometimes I feel so tired and sleeps in class. I am even thinking of stopping, one teacher said I would be repeated because I was not regular, last term, at those times the gold business was booming so I was not always present in school, I wanted to get money to buy books...male respondent in Asiakwa.*

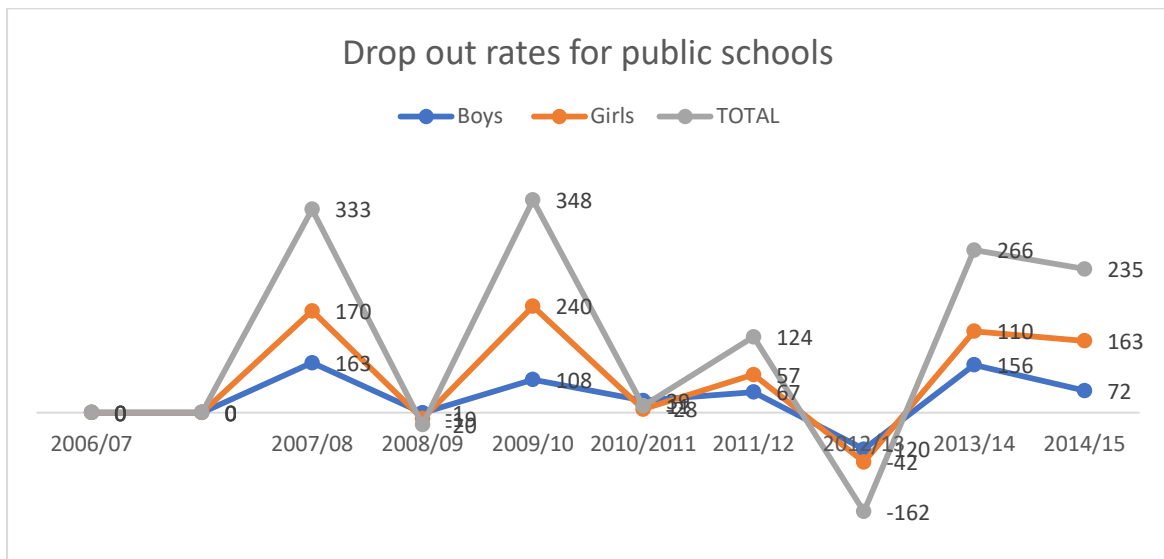
However, the public relation officer at the municipal education office had this to say...

Sometime students themselves drop-out due to their own personal reasons which may not necessary be to galamsey issue, sometimes a child is repeated or retained in a class severally due to poor academic performance. When this happens continuously the child may feel uneasy to stay in the same class with the younger junior classmates, when the girls among them become pregnant they feel shy to go again and as a result may not go to school again...Maxwel Owusu, PRO of the Municipal education directorate.

Due to the problem of assessing data which draws a clean line of distinction between children who enroll in schools, those who actually dropout of school, repeated, withdrawn to other schools or passed-on and those who joined the class from other schools intermittently, the researcher was of the view that this might weaken the reliability of the results, the dropout

analysis on the both boys and girls within their years of schooling was made from the absolute enrolment figures obtained from the district education office within that span of time. In considering the dropout rate in the study area, the trend analysis under which a cohort was traced from primary to the JHS was used.

Figure 4.6 Dropout rates for 2015 class of boys and girls in public schools in East Akim Municipal (2006-2015)



Source: Author's Construct, 2019

Table (appendix 'A') shows that the 2015 batch of students who completed the JHS started primary-one in the year 2006/2007. The following year, the boys reduced by 163 as against 170 for the girls. Two years later in primary three, the enrolment rather increased in the advent of the mining activities. This may partly due to the fact that parents sent their wards to school so that they (parents) can go and work at the various sites for money. At primary four, the total of 348 (boys and girls) dropped-out of the public schools. In 2010/2011, 39 boys dropped again but the enrolment of the girls increased by 28 pupils. Both sexes experienced some levels of drop-out in the following year. As the children made upward mobility on the educational ladder to the JHS, the enrolment increased for both the boys by 120 and girls by 42. Within a period of three years thus from JHS I in 2012/2013 to JHS 3 in 2014/2015. By tracing the cohort, children who entered Primary one in 2006/2007 with a total enrolment of 3371 had depreciated in enrolment to 2236 with a dropout percentage drop-out of 34%. Those girls experienced 39% against 29% of the boys. This indicates that completion rate for the year group was 66% for whole but the girls had 61% completion rate whilst that of the boys

stood at 71%. Many factors come into play to contribute to the high drop-out percentage of girls in the Municipality including teenage pregnancy.

The head-teacher of Asikam Presby JHS on dropout added that, what I noticed is that the school children don't normally drop off and terminate their education for good,.. they only excuse themselves unceremoniously', you will just not see them in school for some time all of a sudden, when we enquire about them from their friends they tell us he has gone to do 'kolikoli'(dig-out) ,if that person is a girl they will say she is gone to do 'soagum'(carry-into), They will remain there ,meanwhile their colleagues will be learning. They come back at their own time. And these days because of laws, no teacher can sack a student for not coming to school for time. We can only punish them for truancy.

One male respondent at Kyebi-akwadum said that. *After getting money from here to register for my BECE, I couldn't go back to the classroom again and learn like my other friends. I went to write the exam when the exams time was due, but I didn't do well in the BECE. As for the grade I had I won't say it.*

It could be deduced here that absenteeism (truancy) is a problem on the part of the youth who are in school and are also doing the galamsey business in this study area as a result of their engagement in illegal mining activities.

4.5 Dwindling interest in Schooling

Another observation made during the data collection, is the apathy and lack of interest on the part of the illegal miners as far as education was concerned. One of the young male respondents who stopped school in class five after his engagement in the illegal mining business had this to say in a one on one interview, Kwasi, had this to say;

“now the help I need is the assistance to enable me to undergo driving training”; because ‘I don’t know book’ so after the driving I will see if someone can buy a taxi for me.

As far as school is concerned, I am OK where I have gotten to, I don’t want to continue anymore. This is Bismark at KA

Kanu also said, ‘where I have gotten to, I wouldn’t like to continue the school again. I want to be involved in an economic activity that will enable me to take care of myself and my children’,

4.6 Regulation of illegal mining activities

In addition to the above, the mining law is not too extensive on what small-scale entails. It merely states that small-scale concessions have a maximum of 25 acres (Ferringet al.2016: 172), and anybody 18years and above can have a mining license in Ghana.

The absence of operative laws and appropriate binding policies in the mining sector has also become a major cause of the illegal mining upsurge.

A key informant, who referred to as ‘Kappo’ the foreman of Managing God’s resource mining company recounted that, *‘you I, know there are no laws in Ghana that prevent the youth from going to a mining site’, I don’t know if they have some in education but as for the mines sector we don’t have it, that’s why we can’t say by force the children should leave site and go to school. Sometimes they come in their school uniform.*

.We go to site at that younger age, nobody sacked as the elderly people did not say anything to us even, if they had done that, we would have resisted because can’t go and steal, nothing prevented us from going to work for money, a male respondent at Asikam

In addition to these, the Ghana Education Service (GES) does not have any policy regarding the school-going youth and their engagement in mining its related activities at the expense of their education. On this, the district education PRO, Mr Owusu Maxwell, was quick to add that: *“regarding how to tackle Galamsey or illegal mining, GES does not have any policies, policy is about documents which says school children should not engage in mining activities ,in education we don’t have a direct policy on that”* PRO of District education directorate

4.7The attainment of SDG 4 in the wake of illegal mining

Several efforts were made to cross the line in the attainment of the MDGs, that notwithstanding, the SDGs through education and other mutually inclusive partners have roadmaps and measures which seems achievable because several efforts are being made. The respondents were questioned on the projects, programs and services are done or could be done, all towards solving the problems of children trouping mining sites hence attainment of SDG 4 in the Municipality which says that, ‘ensure inclusive and equitable quality education and promote lifelong learning opportunity for all’. Achieving this goal and its target may be quite challenging especially in the selected communities for this study. The officer from GES in the municipality *had this to say on achieving SDG:*

unless the work and commitment that has been started by operation vanguard is not politicized such that no matter the political party in power, otherwise the SDGs may be difficult to achieve

2030 is far but too far from now if we don’t take care and different government comes in and decide to allow these boys to do the illegal mining again then I am afraid, so we must all come together as a country and fight it

,irrespective of the party in power, if we do it like that, we can I achieve it,,,

JHS head-teacher.

'if the "galamsey" is there, then I don't think Ghana can achieve it', this is

how foreman Kappo said on SDGs

In all respondents gave varied responses on how projects, programmes and service by education and mining sector can make or mar the achievement of the SDGs. Questions ranging from education and sensitization on effects of child mining, Making of mining byelaws for minors, provision of infrastructure educational and logistics, the need for proper cooperation among stakeholders and others. Thirty four percent of these people agreed on the pedagogical factors, twenty-two percent said bye-laws can make or unmake the target to be achieved, thirteen percent of the respondent agreed that, the educating and sensitizing on importance of education and the dangers of mining the youth whilst only 11% could not realize any effort by the district.

4.8 Discussion

According to Geoffrey N. Bright (2011), CASMs are noted for their worsened deep-rooted inequalities, as the coal-mining persists. Regeneration of projects, demolition, site clearance creates scars in coalfields and these remain blighted by severe socio-economic problems such as unemployment, long-term sickness, teenage-pregnancy and poverty (Bright, 2011). Illegal mining may also have other social and economic consequences on the people who are mostly involved in the mining activities as well as the community and the nation as a whole. Besides the sex stereotype, discrimination, social prejudice and devaluation in society (Amutabi & Mukhebi, 2001). Natalia Yakovleva has indicated that, women in galamsey communities are very prone to HIV/AIDS and STIs, because of their limited control of their sexuality due to socio-cultural barriers (Yakovleva, 2007). Increase in prostitution and unwanted pregnancy, young girls are most at the losing end because men (both young and old) take undue advantage over them during and after the discovery of gold in mining communities. Illegal miners influence these female teenagers to sleep with them which at the end of the day results in unexpected pregnancy.

It could be deduced that male illegal miners get money from the illegal mining, and they use it to influence the females especially young girls to have sex with them which normally leads to teenage pregnancy.

The illegal mining activity pushes most women into undesirable situations like prostitution and unwanted pregnancy and childbearing. While some women drift to mining towns to indulge in sex trade, indigenous women in illegal mining communities become single mothers after the closure of the mining activities.

Entrapment into life-long (cyclical) poverty has become another problem of galaseyers, having been baited into the operation, it becomes very difficult to exit even after acquiring much but

in most cases, they are never satisfied with their load and always exploring in order to get a bigger booty which may never happen, as a result the youth are not able to escape of their poverty situation even though their main motive was to earn some income and opt out or stop the operation.

The recurring nature of the deficiency is as a result of the low technology they use, (the traditional means of mining), the unpredictability in the price of gold price, irregularity of the ‘booty’ and the role of middlemen (agents) and a host of others. It could be established that most people including the youth who decide to get money and stop become entrapped not because the business is money-fetching but due the barbaric methods they use so they do not get much output. Their educational attainments then become affected as a result of spending much of their educational and times at the galamsey sites. This affects their performances becomes affected, the bad performance weakens their tastes for further education and that lower educational attainment results to their continual stay in the informal sector (with their families). As the poverty level worsens, the galamseyers grow up and produce children or make a family in these wretched situation, the children of these illegal miners may not be able to receive any first-class education from these ‘endangered’ parents and the poverty then becomes recurring or hereditary (cyclical).

There is also increase in other social vices and indecent activities. According to Owusu and Dwomoh (2012), illegal miners revealed that because the work of illegal mining is difficult, they need to take in some drugs which will serve as catalyst or stimulant. Thus, the youth tend to take in drugs like marijuana, cocaine and other hard drugs to enable them work hard for longer periods. In the end, some of them become addicted to the drugs and become social “misfits” thus increasing the rate of school dropouts in the district selected for the study. Immoral activities are also one of the effects of illegal mining among the youth in the district.

4.9 Conclusion

Data analysis reveals that several work and activities go on at the mining sites as far as illegal mining is concerned. Also, many of the youth are into the business as a result of poverty. Illegal mining business, even though volatile, has become an employment avenue for some pupils. Many student-youths absent themselves from school to dig for money which the intention of getting money to support their education. Such student found it difficult to accept the fact that illegal mining is having a toll on students' performance.

However, there is a great connection between the academic performances of student-youth in CASM schools, hence the ascendancy of the menace. Some measures are under way by the stakeholders but the effects of illegal mining activities are enormous; one of such is that the youth who are lured into it are no more willing to continue their education which may become a big toll on the country's quest to attain the goal 4 of the sustainable development goals in 2030, due to the inability of the youth to ascent to a higher educational height. The resulting effect is that, they become trapped in a generational poverty.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The study sought to examine how the increasing interest of the youth in illegal mining may affect Ghana's effort to achieve SDG 4 in mining communities. With respect to the objectives of the study, an underlying postulation in the study has been that, the illegal mining activities has negatively affected the economic and social development of the study area just as it happens in most mining communities in Ghana and other parts of the world. Specifically, the study examined the effect of illegal mining on youth education in East Akim Municipality. The study also looked at the things that are luring the youth out of the classrooms to the mining sites to do illegal mining businesses which results in them becoming trapped in a poverty cycle. It also highlighted on the grade or level of the educational ladder at which most of the youth are most likely to abandon their studies in search of 'Gold'. The kind of work that youth engages in at the site. In this concluding chapter the research findings are summarized, concluded with recommendations and policy implications of the study.

5.1 Summary of Research Findings

The findings presented below meet the aims and objectives of the research. The study found that, the effects of illegal mining activities on the socio-economic development of youth with their education at the centre stage has been of more curses producing more negative effects and some little positive effects

First, some positive effects include improvement in the economic and social parameters as a direct (and indirect) result of the legal and illegal mining activities in the East Akim Municipality; these include; employment: illegal mining activities provide direct and indirect

jobs for the youth in the Municipality. The youth of the area benefits from seasonal employment, this is because during the vacation, weekends and after school, the youth are able to lay hands on jobs that will engage them especially in the long dry seasons, they are able to participate in the illegal mining activities to get money to cater for their educational needs and that of their siblings. These illegal mining activities then become an ‘opportunity-cost’ for other social vices like stealing and gambling to survive which they youth who drop-out from school would have resorted to. Thus, illegal mining becomes an important source of livelihood to some of the Municipality’s youth population.

Furthermore, the illegal mining activity is an income generating venture for the youth. The revenue and earnings of the youth on daily bases as result of their engagement in illegal mining have also been shown to have improved as a result of the illegal mining activities in the area. The amount of money that the youth make spells out how lucrative the business is, hence, their continuous stay in the activity at the expense of their education.

Another significant educational impact is that, some youth who do not get financial support from family members and close friends are likely to end up at the site as a way of making ends meet. To some extent, the illegal mining activities, support the education of some youth in the area, because some of youth are able to take care of their educational needs with the proceeds, they obtain from participation in illegal mining activities. This could be a good step contributing positively towards the attainment of the targets of the Sustainable Development Goal four (SDG 4).

In addition to the above, the mining and illegal mining activities in the area have partly solved the problem of rural-urban migration. It has curtailed the rate at which the youth in the Municipality used to drift to other parts of the country for education and employment

opportunities but to return home and benefit from the inputs that mining activities are injecting into education in the area such as trading in mining inputs, benefiting from scholarships and educational projects under the mining sector or take up jobs in the sector.

On the other hand, the higher incomes of the illegal miners are however not fixed, this affects their ability to plan and invest their profits from that informal sector, in effects, the ability of the sector in making a contribution to the sustainable development of their lives and that of the community, it then make them stuck in a perpetual poverty.

One major negative consequence of the youth's involvement into the illegal mining is the fact that, it does not enable them to come out of their poverty situation even though their main motive was to earn some income and opt out or stop the exploitation. Situation is termed as being trapped in a 'poverty cycle'

The cyclical nature of the poverty is as a result of the low technology they use, (the traditional means of mining), the volatility in the price of gold price, inconsistency of the 'booty' and the role of middlemen (agents) and a host of others. It could be established that most people including the youth who decide to get money and stop become entrapped not because the business is lucrative but due the low technologies they use and many of the factors above, they do not get much output. Their educational attainments then become affected as a result of consuming much of their educational and instructional hours at the illegal mining sites. Their continuous stay in the informal sector with lower standards of living which emanating from low educational attainment. The poverty of their families becomes worsened, in the informal sector, the phenomenon makes them continue in the illegality as they become entrapped in a cycle of poverty.

That notwithstanding, absenteeism and other 'anti-school' attitudes also take tolls on the youth's schooling in the sense that, when the youth become lured into the illegal mining

activities, they do so to the detriment of their educational development. Factors like attendance, retention, discipline, concentration and performance becomes adversely affected. The youth after tasting the 'gold' cash may then decide to go to school on some days and patronize illegal mining another day. Intermittent schooling may eventually lead to drop-out when the student- youth is no more able to combine schooling and working. The drop-out rate and truancy is however controlled by the present of the security apparatus and security personnel in CASM sites as their present in the area deter the school-going youth from coming to the site but rather stay in school.

The academic performance of the youth who are into illegal mining suffer decline since they may not get enough time to stay in school, grasp and revise whatever they have learnt in school and in the end may affect their performances in the BECE. The lack of concentration and the dwindling academic performance of the youth may turn to dumping their interest in education in the long run. These militating effects on education now becomes a challenge on the nation's commitment to achieving to achieving quality education through ensuring an inclusive and equitable quality education and promoting of a lifelong learning opportunity for all in 2030.

5.2 Conclusion

Based on the above findings, the following conclusions are made:

First, poverty has been a major push factor and a reason for which many school-going youths become illegal miners. Some youth prefer illegal mining sites to classrooms because the institutions, society and the family fail to offer them the needed financial support. Also, the laws of the sectors do not prevent them from doing so and the illegal mining business is also lucrative in spite of the accompanying risks.

Second, Illegal gold mining, even though is still taking place in certain parts of the country cannot be spotted in communities where there is high security presence and students scarcely absent themselves from schools to participate in galamsey unless at the blind side of the operation Vanguard in CASM. The academic performance of these students is adversely affected as a result but the some of the youth deliberately or ignorantly refuse to accept this fact by justifying it with how the output contribute in their education. Some youth who have dropped out of school resort to illegal mining as an alternative avenue for curing their idleness and joblessness. The money that they get enslaves them and they become unwilling to go back to classroom. Even though illegal mining affect different categories of people in a different way, the education of the youth is much adversely affected, apart from other health related dangers that the sector poses on them.

Illegal mining has thus failed to contribute to the attainment of the equitable and quality education as stated in the sustainable development goal four .Beside this challenges, the youth may also be obliged to resort to or remain in the illegal mining business ,this is because they have low educational attainment and hardly can they be absorbed by the formal sector hence remain in their worsened poor condition to an extend of becoming chronic or generational poverty in the not far future.

There is therefore the need to devise a better means of harnessing the resources without compromising the educational attainment of the youth.

5.3 Recommendations

In respect to the above, the following recommendations have been made:

Even though the fCUBE, capitation grant, free school feeding programs and Free Secondary School Policies are still in place, there must be other additional financial assistance for needy children in CASM towards their educational endeavors. This can be done through funds set aside from proceeds and royalties paid to leaders of mining communities and government.

This will complement the free Secondary and Junior High School policies and facilitate the attainment of the SDG 4.

This study found out that the various effects resulting from the illegal mining activities; be it economic, social, and environmental do not happen in isolation. Rather, there are interfaces between the causes and effects amongst the various parameters involved in all the three main areas or modules of interaction, thus, illegal mining, youth and education. Therefore the need for a concentric and inter-sectoral collaboration between the central government and all the stakeholders involved; the education ministry, mining, the youth and, the security as well as CSOs and beneficiaries in the mining communities wouldn't be a wasted effort. This will help to address any problem holistically through the better enforcement, legislative support and policy enactments, an approach involving all the stakeholders including the indigenes as the ways to effectively promote the sustainable development of the communities.

To buttress this, the Institute of Statistical, Social and Economic Research(ISSER),University of Ghana's report on the state of the Ghanaian economy in 2016,has also indicated that, the 'Multilateral Mining Integrated Project(MMIP) approach by the government to rationalize the processes of Artisanal small-scale miners by grouping the illegal miners and assigning with discovered lands must also train the youth and other illegal miners in alternative livelihood programs such as tree-planting and reclamation exercise(The state of the Ghanaian Economy in 2016, 2017).

In addition, the youth in mining communities as part of the communities in mining projects (CMP)must be assisted to enable them to attain higher education and living standard. Initiating a 'youth assisted program' in all mining communities where they can be educated, counseled and trained in vocational, technical and technological knowledge can also help. The security operatives must widen the operations to all CASM since the students sometimes play 'hide and seek' game with them.

Beside these, the youth may also be obliged to resort to or remain in the illegal mining business, because they have limited chances of survival coupled with low educational attainment and hardly can they be absorbed by the formal sector. As a result, they remain in their worsened poor condition to the extent of becoming rooted in chronic poverty in the not far future. This means that future research must consider researching into appropriate assistant programs that can be instituted in mining communities for the benefit of the poor and vulnerable groups like women and youth.

Also in creating both permanent and temporal jobs for the youth, Governments must factor the directive of the national Youth implementation Guidelines that state that ‘the state shall established a National Youth Employment Taskforce(NYETF) which shall have representations from CSOs including youth groups in mining communities and not only from the Government machineries or political allies. Those in the formal sector must not be considered at expense of those in the informal sector especially those at the various mining communities.

Lastly, vulnerable groups like women and youth who are the least beneficiaries in times of mining activities turn be the most affected in CASM where illegal mining activities has ceased. This because they may lose their education or become single parents, there is therefore the need to empower them through skills training and alternative livelihood support programs. As Simpson, a renowned scholar in international mining strategy and development indicated that, “sustainability in mining means making the best use of a (mineral) resource to ensure that the area containing the resource will be fit to support other livelihood sustaining activities when mining is history”. (Simpson, 1999).

There is therefore the need to devise a better means of harnessing the resources without compromising the educational attainment of the youth

5.4 Policy implication

In every society, both the governor and governed need to have a (legitimized) structured models which they look up or act in conformity to. The changes in the 21st century governance structure has its implication that there must be welfare services that ensure that both the society and the market distribute power, allocate resources, opportunities and rewards which are furnished by governments (Donnison, 1979). Taking into consideration, the access to quality education, good healthcare, equal employment opportunities, affordable housing, good wages amongst others must all be evenly distributed.

There are government policies that seek to address this disparity in the system like free compulsory basic education fCUBE, free Senior High School, the national health insurance scheme, the nation builders corps (Nabco), these means that there has been attempts by governments of the state to create the enabling environment that would make people access education or gain employment.

However there are currently no laws or policies formulated by the Mining or the Youth ministry, Ministry of Education, The local Government ministry, Ghana Education Service, the East Akim Municipal Assembly or the education directorate of East Akim that governs the exodus and the engagement of the school children from the classroom to the (illegal) mining sites.

A critical consideration of the issue under study; ‘effects of illegal mining on youth education in the East Akim Municipality of Ghana’, gives an indication that, there were a lot of legitimate concerns raised but key amongst these reasons were poverty and unemployment where the youth-in-school feel marginalized in the wake of poverty and therefore decides to take steps to also benefit from the community’s resources, even at expense of their education.

The policy interventions here must consider these social movement involve(the youth),their educational rights, their working rights, the gold mining and the contribution of all these in the development of the nation as mutually inclusive whist drawing up a comprehensive policy that takes care of all actors involved; the state(and all the related Ministry, Civil Society Organizations/Institutions),the community(youth and Traditional Authorities) and other development factors including International organizations, the Donor Agencies as well as the Private Sectors.

The National Youth Policy of Ghana written by the ministry of youth and sports in collaboration with the National Youth Authority takes into account identifiable groups such as Post-Basic and Secondary School Dropouts by facilitating equal access to relevant skills and equality in educational opportunities. It also considers Out-of-school (but not students-in-school), Unemployed Under-employed youth, programs and projects that can be developed to benefit the youth for self-employment and wealth-creation and for global market even though the percentage and age of the youth involvement is not clearly stated. As a matter of urgency, it must interlace together with the diverse process and the dynamics of youth engagements to be able to tease out a better implication for these engaging moments (Gyampo and Odoom,2013)

The listing of Ghana on a number of national and international commitments in the provision of education including the governments pronouncements in the 1992 Constitution to ensure that every Ghanaian is afforded equitable opportunity in terms of access to quality education. The Education Act 788 of 2008 and The Ten-year Education Strategic Plan(2010-2020) as well as international Commitments like the SDGs, the World Declaration on Education for All and the Jomtien(1990) have stakes in this policy which lay no emphasis on the acceptance of school-going Children and the Youth at the various Mining Sites.

The various mining policies in Ghana also lack the required provisions for the Children and the Youth engaged in both (legal and illegal) mining activities at the site to the detriment of their educational endeavors and their prospects. The launching and implementation of the Community mining Project (CMP) by the President to formalize mining in selected communities across the country and create jobs, is a laudable initiative but should be backed by a formidable policy framework in that direction. These moves through the General Circulation Model GCM can effectively tackle the menace; the GCM is the formulation of proposal for legislation, regulations, byelaws and all measures under mining.

These laid down mutually inclusive policies in consultation with all the parties involved especially the youth in the decision-making processes can yield a very good result. This is likened to what Tali Gal said, that is; 'the ability of young ones and youths to meaningfully take part when deciding on issues that affect their lives seems to be linked to a range factors beyond a given contest. These factors include personal traits, parents motivation and perception of parents and family members as well as other personal characteristics; the motivation and perceptions of parents, family members, and other related adults, such as professionals in the education, welfare, and justice systems; as well as the relevant regulatory structures at the organizational, local, and national levels''(Gal, 2017).

REFERENCES

- Acheampong, T. Y. (2019). Government as Employer of last Resort as a solution to youth unemployment in Developing Countries:Lessons from Ghana's National Youth employment Programme. *International and Comparative Labour studies*, 5-6.
- Addae-Mensah, I. (2000). *Education in Ghana: A tool for social mobility or social stratification?* : Ghana Academy of Arts and Sciences.
- Adu-Gyamfi.J.(2013) Can children and Young people be empowered in participatory initiatives?Perspectives from young people's participation in policy formulation and implementation in Ghana
- Agyapong, D. (2010). Micro, small and medium enterprises' activities, income level and poverty reduction in ghana-A synthesis of related literature. *International Journal of Business and Management*, 5(12), 196.
- Airo, J. A. (2010). Financing small scale mining :strategies for small scale miners. *Association of Geosceintists*, 12-18.
- Aisenberg, E., & Mennen, F. E. (2000). Children exposed to community violence: Issues for assessment and treatment. *Child and Adolescent Social Work Journal*, 17(5), 341-360.
- Akabzaa, T., & Darimani, A. (2001). Impact of mining sector investment in Ghana: A study of the Tarkwa mining region. *Third World Network*, 47-61.
- Ankutse, B. (2016). *Assessing the effects of mining on the educational life of children in the Asutifi District in the Brong Ahafo Region of Ghana.*
- Aryee, B. N., Ntibery, B. K., & Atorkui, E. (2003). Trends in the small-scale mining of precious minerals in Ghana: a perspective on its environmental impact. *Journal of Cleaner production*, 11(2), 131-140.

- Attipoe-Fittz, S. (2010). Interview with Selasi Seth Attipoe-Fittz. *Deputy National Coordinator, National Youth Employment Programme (NYEP) in Accra on 20th September.*
- Barry, M. (1996). *Regularizing informal mining-a summary of the proceedings of the international roundtable on artisanal mining*: The World Bank.
- Berger, A. R. (2008). The importance of small scale mining *Engineering Geology*, 59(1), 24-29.
- Bhattacharjee, A. (2012). *Social science research: Principles, methods, and practices.*
- Boateng, R. (2014). *Research made Easy. Pearl Richard Foundation.*
- Bryman, A. (2008). Why do researchers integrate/combine/mesh/blend/mix/merge/fuse quantitative and qualitative research. *Advances in mixed methods research*, 87-100.
- Buchert, L. (1995). The concept of Education for All: what has happened after Jomtien? *International review of education*, 41(6), 537-549.
- Buka, S. L., Stichick, T. L., Birdthistle, I., & Earls, F. J. (2001). Youth exposure to violence: Prevalence, risks, and consequences. *American journal of Orthopsychiatry*, 71(3), 298-310.
- Buxton, A. (2013). Responding to the challenge of artisanal and small-scale mining. *How can knowledge networks help.*
- Chidiebere, O. D. I., Uchenna, E., & Kenechi, O. (2014). Maternal sociodemographic factors that influence full child immunisation uptake in Nigeria. *South African Journal of Child Health*, 8(4), 138-142.
- Clark, K., & Summers, L. (1981). Demographic Variation in Cyclical Employment Effects. *Journal of Human Resources*, 18(1), 61-79.

- Clark, K. B., & Summers, L. H. (1982). The dynamics of youth unemployment. In *The youth labor market problem: Its nature, causes, and consequences* (pp. 199-234): University of Chicago Press.
- Clark, K. B., Summers, L. H., Holt, C. C., Hall, R. E., Baily, M. N., & Clark, K. B. (1979). Labor market dynamics and unemployment: a reconsideration. *Brookings Papers on Economic Activity*, 1979(1), 13-72.
- Coles, R. (2000). *The moral life of children*: Atlantic Monthly Press.
- Crabtree, B. F., & Miller, W. L. (1999). *Doing qualitative research*: sage publications.
- Creswell, J. W. (2013). Steps in conducting a scholarly mixed methods study.
- Djangmah, J. (2000). Some thoughts on the future of Ghanaian universities. *GHANA: CHANGING VALUES/CHANGING TECHNOLOGIES*.
- Donkoh, S., Tiffin, R., & Srinivasan, C. (2009). Adoption of green revolution services and poverty reduction in Ghana. *Ghana Journal of Development Studies*, 6(1).
- Donnison, D. (1979). social Policy since Titmuss. *social policy journal*, 145-156.
- Eduzie, E. (2002). Ghana Country Report on Youth Employment. *Accra: Youth Employment Network-Ghana*.
- Eggert, R. G. (2001). Mining and economic sustainability: National economies and local communities. *A Study Prepared for the Mining, Minerals, and Sustainable Development Project, Colorado School of Mines*.
- Elly, M. (2015). *Determinants of Quality education provided at Secondary School Level*. Retrieved from Ezunbe:
- Exchange, G. S. (2018).
- Ferring, D., Hausermann, H., & Effah, E. (2016). Site specific: Heterogeneity of small-scale gold mining in Ghana. *The Extractive Industries and Society*, 3(1), 171-184.

- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.
- Gal, T. (2017). An Ecological model of Child and Youth Participation. *Children and Youth service Review ,Elsevier Science Direct*, 57-64.
- Garcia-Reid, P., Reidss, R. J., & Peterson, N. A. (2005). School engagement among latino youth in an urban middle school context; Valuing the Role of Social Support. *Education And Urban Society, Vol.37 No. 3*, 257-275.
- Gorski, J. D., & Pilotto, L. (1993). Interpersonal violence among youth: A challenge for school personnel. *Educational Psychology Review*, 5(1), 35-61.
- Gyampo and Odoom (2013) Youth Participation in local and National Development in Ghana 1620-2013
- Hanushek, E. A. (1986). The economics of schooling: Production and efficiency in public schools. *Journal of economic literature*, 24(3), 1141-1177.
- Hanushek, E. A. (1996). A more complete picture of school resource policies. *Review of Educational Research*, 66(3), 397-409.
- Hassan, A. B., Lass, F. D., & Makinde, J. (2012). Cybercrime in Nigeria: causes, effects and the way out. *ARNP Journal of Science and Technology*, 2(7), 626-631.
- Heady,C (2003).The effects of child labor on learning achievement,World Development 31(2):385-398.
- Hentschel, T., Hruschka, F., & Priester, M. (2002). Global report on artisanal and small-scale mining. *Report commissioned by the Mining, Minerals and Sustainable Development of the International Institute for Environment and Development. Download from http://www.iied.org/mmsd/mmsd_pdfs/asm_global_report_draft_jan02.pdf on, 20(08), 2008.*

- Hilson, G. (2002a). The environmental impact of small-scale gold mining in Ghana: identifying problems and possible solutions. *Geographical Journal*, 168(1), 57-72.
- Hilson, G. (2002b). An overview of land use conflicts in mining communities. *Land use policy*, 19(1), 65-73.
- Hilson, G. (2010). Child labour in African artisanal mining communities: Experiences from Northern Ghana. *Development and change*, 41(3), 445-473.
- Hilson, G. (2012). Corporate Social Responsibility in the extractive industries: Experiences from developing countries. *Resources Policy*, 37(2), 131-137.
- Hilson, G., & Banchirigah, S. M. (2009). Are alternative livelihood projects alleviating poverty in mining communities? Experiences from Ghana. *The Journal of Development Studies*, 45(2), 172-196.
- Hilson, G., & Garforth, C. (2012). 'Agricultural poverty' and the expansion of artisanal mining in Sub-Saharan Africa: experiences from Southwest Mali and Southeast Ghana. *Population research and policy review*, 31(3), 435-464.
- Hilson, G., & Pardie, S. (2006). Mercury: an agent of poverty in Ghana's small-scale gold-mining sector? *Resources Policy*, 31(2), 106-116.
- Hilson, G., & Potter, C. (2003). Why is illegal gold mining activity so ubiquitous in rural Ghana? *African Development Review*, 15(2-3), 237-270.
- Hilson, G., & Potter, C. (2005). Structural adjustment and subsistence industry: artisanal gold mining in Ghana. *Development and change*, 36(1), 103-131.
- Hodkinson, P., & Hodkinson, H. (2001). *The strengths and limitations of case study research*. Paper presented at the learning and skills development agency conference at Cambridge.
- ISSER. (2017). The State of the Ghanaian Economy in 2016

- Janowitz, M. (1975). Sociological theory and social control. *American journal of Sociology*, 81(1), 82-108.
- Kuma, J. S., & Yendaw, J. A. (2010). The need to regularise activities of illegal small-scale mining in Ghana: A focus on the Tarkwa-Dunkwa Highway. *International Journal of Geosciences*, 1(03), 113.
- Labonne, B. (2003). Seminar on artisanal and small-scale mining in Africa: identifying best practices and building the sustainable livelihoods of communities. *The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries*. AA Balkema, The Netherlands, 131-150.
- Liwanga, R.-C. (2013). Child miners face death for tech. *CNN Freedom Project*, June, 26.
- MacDonald, R., & Marsh, J. (2004). Missing school: Educational engagement, youth transitions, and social exclusion. *Youth & Society*, 36(2), 143-162.
- Mancini, L., & Serenella, S. (2008). Social impact assessment in the mining Sector : Review and Comparison of indication frameworks. *Resources Policy*.
- Modell, J., & Elder Jr, G. (2002). *Children develop in history: So whats new*. Paper presented at the Child psychology in retrospect and prospect. The Minnesota Symposium.
- Ofei-Aboagye, E., Thompson, N. M., Al-Hassan, S., Akabzaa, T., & Ayamdoo, C. (2004). Putting miners first: understanding the livelihoods context of small-scale and artisanal mining in Ghana. *A Report for the Centre for Development Studies*. Swansea: Swansea University.
- Okeshola, F. B., & Adeta, A. K. (2013). The nature, causes and consequences of cyber crime in tertiary institutions in Zaria-Kaduna state, Nigeria. *American International Journal of Contemporary Research*, 3(9), 98-114.
- Osei-Poku, G., & Kootin-Sanwu, V. (2019). The Sustainable Development Goals-A Review of Ghana's current state. *ResearchGate*, 2--3.

- Owusu, E. E., & Dwomoh, G. (2012). The impact of illegal mining on the Ghanaian youth: evidence from Kwaebibirem district In Ghana. *Research on Humanities and Social Sciences*, 2(6), 86-93.
- Owusu, E. O. (2003). *A Handbook on Education for Teacher*. Accra: Cootek LTD.
- Poku, G. O.-., & Sanwu, V. K.-. (2019). The Sustainable Development Goals – a review of ghana’s current state.
- Raymond, R. (1968). Determinants of the quality of primary and secondary public education in West Virginia. *Journal of Human Resources*, 450-470.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality traits from childhood to old age: a quantitative review of longitudinal studies. *Psychological bulletin*, 126(1), 3.
- Sala, S., Vasta, A., Mancini, L., Dewulf, J., & Rosenbaum, E. (2015). Social Life Cycle Assessment: State of the art and challenges for supporting product policies. *JRC Technical Reports*.
- Simpson, J. (1999). International Mining Strategy. *Intermediate Technology Development Group, London*.
- Sinding, K. (2005). *The dynamics of artisanal and small-scale mining reform*. Paper presented at the Natural Resources Forum.
- Sports, M. o. Y. (2011). National Youth Policy of Ghana: Towards an empowered youth, impacting positively on national development
- The state of The Ghanaian Economy In 2016*. (2017). Retrieved from Accra:
- The state of the Ghananaian Economy in 2016*. (2017). Retrieved from Accra:
- Thorsen, D. (2012). Children working in mines and quarries: evidence from West and Central Africa.

Tschakert, P. (2009). Recognizing and nurturing artisanal mining as a viable livelihood.

Resources Policy, 34(1-2), 24-31.

Verschuren, P. (2003). Case study as a research strategy: some ambiguities and opportunities.

International Journal of Social Research Methodology, 6(2), 121-139.

Yakubu, B. (2000). Mining: The Environment and Sustainable Development. In: Ibadan,

Education Cita Printing.

Yin, R. K. (1993). Case study research design and methods applied. *Social Research Methods*

Series, 5.

Yin, R. K. (2009). Case study methods: Design and methods. In: Thousand oaks: SAGE.

APPENDICES

APPENDIX A

Enrolment for public and private schools in East Akim Municipal (2006-2015)

public	Academic year								
	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Class	Prim. 1	Prim. 2	Prim. 3	Prim. 4	Prim. 5	Prim. 6	JHS 1	JHS 2	JHS 3
Boys	1696	1533	1534	1426	1387	1320	1440	1284	1212
Girls	1675	1505	1524	1284	1312	1255	1297	1187	1024
TOTAL	3371	3038	3058	2710	2699	2575	2737	2471	2236
private									
boys	319	346	322	397	371	391	266	242	179
Girls	310	320	275	448	401	393	289	282	196
TOTAL	629	666	597	845	772	784	555	524	375

Source: Ministry of Education 2015

APPENDIX B

Dropout rates for private and public schools in East Akim Municipal (2006-2015)

Gender	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Boys	0	163	-1	108	39	67	-120	156	72
Girls	0	170	-19	240	-28	57	-42	110	163
TOTAL	0	333	-20	348	11	124	-162	266	235

Source:GES/ MoE 2015

APPENDIX C

QUESTIONNAIRE / INTERVIEW GUIDE FOR THE YOUTH

My name is AFOAKWA KRODUA, from the Centre for Social Policy Studies, University of Ghana. I am conducting a study into the “EFFECTS OF ILLEGAL MINING ON YOUTH EDUCATION IN THE EAST AKIM MUNICIPALITY OF GHANA. The study is purely for academic purposes and responses from you will be treated with much confidentiality.

Your valuable contribution will assist me to know the factors that have contributed to the upsurge of illegal mining in some Ghanaian communities. Examine the reasons for which the youth are interested in it these days, the effect it has on their education and the strategies that can inform stakeholders in conceptualizing and formulating policies to sustainably arrest the menace. I would be grateful if you could help me find answers to the following questions.

- 1) What are the factors that have contributed to the upsurge of illegal mining in some Ghanaian communities in recent times?
- 2) What is the attitude of you the youth towards the illegal mining?
- 3) In your view, what pushes the youth of these communities into the illegal activity
- 4) How do you see the illegal mining activity is weighing down your education?
- 5) How much money do you get in a day, after working?
- 6) What type of work do you do at the mining site?
- 7) At which stage of your education, did you start the illegal mining?
- 8) How long have you been doing illegal mining?

- 9) How has the illegal mining activities affected education of the youth in this area in terms of enrolment, drop-out and retention rates as well as performance?
- 10) Do the education office and other stake holders have any programs/ projects/services or initiatives in place that can help keep the interest of the school-going youth in education instead of illegal mining?
- 11) What have been the challenges in fighting illegal mining over the years?
- 12) Per your shifted interest from education to illegal mining activities, do you see many of the youth in this community completing JHS, SHS/ Training College, Polytechnics and University in the next 10 to 12 years ahead?
- 13) What do you suggest to be done to effectively improve the interest of youth of this community in education?

APPENDIX D

QUESTIONNAIRE / INTERVIEW GUIDE FOR PARENTS, EDUCATION OFFICES, MINING FIRMS AND OTHER STAKEHOLDERS

My name is AFOAKWA KRODUA, from the Centre for Social Policy Studies, University of Ghana. I am conducting a study into the “EFFECTS OF ILLEGAL MINING ON YOUTH EDUCATION IN THE EAST AKIM MUNICIPALITY OF GHANA. The study is purely for academic purposes and responses from you will be treated with much confidentiality.

Your valuable contribution will assist me to know the factors that have contributed to the upsurge of illegal mining in some Ghanaian communities. Examine the reasons for which the youth are interested in it these days, the effect it has on their education and the strategies that can inform stakeholders in conceptualizing and formulating policies to sustainably arrest the menace. I would be grateful if you could help me find answers to the following questions

- 1) What is the major occupation for the people of this community?
- 2) Are you aware that illegal mining activity is on the increase in these communities?
- 3) What do you do think are the causes of these upsurge in recent times?
- 4) Generally, what are some of the effects of the illegal mining activities?
- 5) How do these illegal mining activities effect the education of the youth in these communities, in terms of enrolment, dropout rate and retention rate and performance?
- 6) Per the continues rising of the youth in the illegal mining activity, do you fore see many youths of the area completing JHS, SHS Training college and University in response to Ghana’s commitment to achieving the SDG 4 by 2030.

- 7) Do you have any programs/ projects/services or initiatives in place that can that can help keep the interest of the youth in education instead of illegal mining?
- 8) In your opinion has the advent of mining activity in the area helped education in the Municipality.

APPENDIX E

SAMPLE OF INTRODUCTORY LETTER

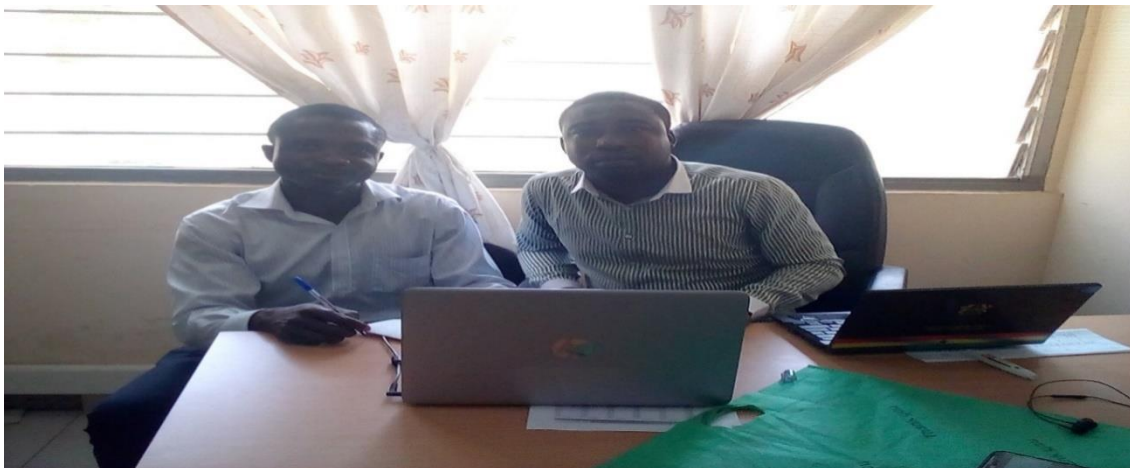
APPENDIX F

A typical Galamsey mining site



Source: Author's field survey.

**A PICTURE OF THE RESEARCHER AND THE PLANNING & STATISTICS
OFFICER AT GES, EAST AKIM MUNICIPAL EDUCATION DIRECTORATE**



SOURCE: FIELD SURVEY, 2019.

**A PHOTOGRAPH OF THE RESEARCHER AND THE PUBLIC RELATIONS
OFFICER AT GES, EAST AKIM MUNICIPAL EDUCATION DIRECTORATE**



SOURCE:FIELD SURVEY, GES, EAST AKIM 2019.

TITLE	COMMENTS	STUDENTS RESPONSE
GENERAL INFORMATION	i) Good Background Information ii) Clarity of Expression: long introduction but with clarity and some strong assertions. Rewording of the phrase 'retrogression effect' iii) Objectives were stated clearly	i) Introduction reviewed by summarizing some sections ii) The phrase has been changed and reworded as 'worsening"
DESIGN AND RELEVANT OF METHODOLOGY	Choice of qualitative is satisfactory ii) Description of data collection is appropriate but repetitive	i) All repetitions have been dealt with and deleted where necessary.
MAJOR FINDINGS FROM THE RESEARCH	The findings of the study carried out in a fair manner. The word 'effect' requires a lot of rigorous and detailed analysis It is important to provide evidence of who speaking and at what time	i.) Appropriate sources have been provided where necessary to who is speaking at what time but the names of the towns replaced with abbreviations.

AFOAKWA KRODUA (STUDENT)

SIGNATURE: 

DATE 01 - 10 - 2020

DR. ERNESTINA KORLEKI DANKYI (SUPERVISOR)

SIGNATURE: 

DATE: 01/10/2020